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alerts (SDIs) affected  
NEWS 11 DEC 17 SOLIDSTATE reloaded; updating to resume; current-awareness  
alerts (SDIs) affected  
NEWS 12 DEC 17 CERAB reloaded; updating to resume; current-awareness  
alerts (SDIs) affected  
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NEWS 14 DEC 30 EPFULL: New patent full text database to be available on STN  
NEWS 15 DEC 30 CAPLUS - PATENT COVERAGE EXPANDED  
NEWS 16 JAN 03 No connect-hour charges in EPFULL during January and  
February 2005  
NEWS 17 FEB 25 CA/CAPLUS - Russian Agency for Patents and Trademarks  
(ROSPATENT) added to list of core patent offices covered  
NEWS 18 FEB 10 STN Patent Forums to be held in March 2005  
NEWS 19 FEB 16 STN User Update to be held in conjunction with the 229th ACS  
National Meeting on March 13, 2005  
NEWS 20 FEB 28 PATDPAFULL - New display fields provide for legal status  
data from INPADOC  
NEWS 21 FEB 28 BABS - Current-awareness alerts (SDIs) available  
NEWS 22 FEB 28 MEDLINE/LMEDLINE reloaded  
NEWS 23 MAR 02 GBFULL: New full-text patent database on STN  
NEWS 24 MAR 03 REGISTRY/ZREGISTRY - Sequence annotations enhanced  
NEWS 25 MAR 03 MEDLINE file segment of TOXCENTER reloaded  
NEWS 26 MAR 22 KOREAPAT now updated monthly; patent information enhanced  
NEWS 27 MAR 22 Original IDE display format returns to REGISTRY/ZREGISTRY  
NEWS 28 MAR 22 PATDPASPC - New patent database available  
NEWS 29 MAR 22 REGISTRY/ZREGISTRY enhanced with experimental property tags  
  
NEWS EXPRESS JANUARY 10 CURRENT WINDOWS VERSION IS V7.01a, CURRENT  
MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),  
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FILE COVERS 1907 - 23 Mar 2005 VOL 142 ISS 13

FILE LAST UPDATED: 22 Mar 2005 (20050322/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s synergy

9076 SYNERGY

364 SYNERGIES

L1 9392 SYNERGY

(SYNERGY OR SYNERGIES)

=> s synergy and (antioxidant? or lipoic acid? or "acetyl-L-carnitine" or resveratrol or lecithin? or "N-acetyl cysteine")

9076 SYNERGY

364 SYNERGIES

9392 SYNERGY

(SYNERGY OR SYNERGIES)

123295 ANTIOXIDANT?

3317 LIPOIC

4627513 ACID?

3275 LIPOIC ACID?

(LIPOIC(W)ACID?)

146459 "ACETYL"

63 "ACETYLS"

146494 "ACETYL"

("ACETYL" OR "ACETYLS")

1394892 "L"

9524 "CARNITINE"  
 318 "CARNITINES"  
 9541 "CARNITINE"  
     ("CARNITINE" OR "CARNITINES")  
 616 "ACETYL-L-CARNITINE"  
     ("ACETYL"(W)"L"(W)"CARNITINE")  
 2247 RESVERATROL  
     23 RESVERATROLS  
 2248 RESVERATROL  
     (RESVERATROL OR RESVERATROLS)  
 38776 LECITHIN?  
 2782225 "N"  
 146459 "ACETYL"  
     63 "ACETYLS"  
 146494 "ACETYL"  
     ("ACETYL" OR "ACETYLS")  
 94754 "CYSTEINE"  
     5243 "CYSTEINES"  
 96816 "CYSTEINE"  
     ("CYSTEINE" OR "CYSTEINES")  
     811 "N-ACETYL CYSTEINE"  
         ("N"(W)"ACETYL"(W)"CYSTEINE")  
 L2      152 SYNERGY AND (ANTIOXIDANT? OR LIPOIC ACID? OR "ACETYL-L-CARNITINE  
         " OR RESVERATROL OR LECITHIN? OR "N-ACETYL CYSTEINE")

=> s 12 and (cognitive or cognition or auditory or hearing)

13773 COGNITIVE  
 9699 COGNITION  
     22 COGNITIONS  
 9712 COGNITION  
     (COGNITION OR COGNITIONS)  
 6889 AUDITORY  
 4636 HEARING  
     102 HEARINGS  
 4734 HEARING  
     (HEARING OR HEARINGS)

L3           2 L2 AND (COGNITIVE OR COGNITION OR AUDITORY OR HEARING)

=> d 13 1-2

L3   ANSWER 1 OF 2   CAPLUS   COPYRIGHT 2005 ACS on STN  
 AN   2003:764133   CAPLUS  
 DN   140:35824  
 TI   Combination therapy of donepezil and vitamin E in Alzheimer disease  
 AU   Klatte, Emily T.; Scharre, Douglas W.; Nagaraja, Haikady N.; Davis,  
     Rebecca A.; Beversdorf, David Q.  
 CS   Department of Neurology, Ohio State University, Columbus, OH, 43210, USA  
 SO   Alzheimer Disease and Associated Disorders (2003), 17(2), 113-116  
     CODEN: ADADE2; ISSN: 0893-0341  
 PB   Lippincott Williams & Wilkins  
 DT   Journal  
 LA   English  
 RE.CNT 9       THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD  
               ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3   ANSWER 2 OF 2   CAPLUS   COPYRIGHT 2005 ACS on STN  
 AN   2002:532957   CAPLUS  
 DN   138:100202  
 TI   Neuroprotective profile of enoxaparin, a low-molecular-weight heparin, in  
     in-vivo models of cerebral ischemia or traumatic brain injury in rats: a  
     review  
 AU   Mary, Veronique; Wahl, Florence; Grosjean-Piot, Odile; Uzan, Andre; Pratt,  
     Jeremy  
 CS   Neurodegenerative Disease Group, Aventis Pharma, Vitry sur Seine, 94403,

Fr.  
SO CNS Drug Reviews (2002), 8(1), 1-30  
CODEN: CDREFB; ISSN: 1080-563X  
PB Neva Press  
DT Journal; General Review  
LA English  
RE.CNT 84 THERE ARE 84 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d 13 2 ibib ed abs

L3 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:532957 CAPLUS

DOCUMENT NUMBER: 138:100202

TITLE: Neuroprotective profile of enoxaparin, a low-molecular-weight heparin, in in-vivo models of cerebral ischemia or traumatic brain injury in rats: a review

AUTHOR(S): Mary, Veronique; Wahl, Florence; Grosjean-Piot, Odile; Uzan, Andre; Pratt, Jeremy

CORPORATE SOURCE: Neurodegenerative Disease Group, Aventis Pharma, Vitry sur Seine, 94403, Fr.

SOURCE: CNS Drug Reviews (2002), 8(1), 1-30  
CODEN: CDREFB; ISSN: 1080-563X

PUBLISHER: Neva Press

DOCUMENT TYPE: Journal; General Review

LANGUAGE: English

ED Entered STN: 17 Jul 2002

AB A review. The development of treatments for acute neurodegenerative diseases (stroke and brain trauma) has focused on (i) re-establishing blood flow to ischemic areas as quickly as possible (i.e., mainly antithrombotics or thrombolytics for stroke therapy) and (ii) on protecting neurons from cytotoxic events (i.e., neuroprotective therapies such as antiexcitotoxic or anti-inflammatory agents for stroke and neurotrauma therapies). This paper reviews the preclin. data for enoxaparin in in-vivo models of ischemia and brain trauma in rats. Following a photothrombotic lesion in the rat, enoxaparin reduced edema at 24 h after lesion when the treatment was started <18 h after insult. Enoxaparin was also tested after an ischemic insult by using the transient middle cerebral artery occlusion (tMCAO) model in the rat. Enoxaparin, 1.5 mg/kg, i.v., twice, reduced the lesion size and improved the neuroscore when the treatment was started <5 h after ischemia. When administered 5 h after insult, enoxaparin reduced cortical lesion size in a dose-dependent manner. In permanent MCAO, enoxaparin (5 and 24 h after insult) reduced lesion size and improved neuroscore. A slight and reversible elevation of activated partial thromboplastin time suggests that enoxaparin is neuroprotective at a nonhemorrhagic dose. Traumatic brain injury (TBI) is often accompanied by secondary ischemia due in part to edema-induced compression of blood vessels. When enoxaparin, 0.5 mg/kg i.v. + 4 + 1 mg/kg s.c., was administered >30 h after TBI, it reduced edema in the hippocampus and parietal cortex. One week after TBI the lesion size was reduced and the neurol. deficit improved in enoxaparin-treated animals. Finally, the **cognitive** impairment was improved by enoxaparin 48 h-2 wk after TBI. The anticoagulant properties of unfractionated heparin and, specifically, enoxaparin can explain their anti-ischemic effects in exptl. models. Furthermore, unfractionated heparin and, specifically, enoxaparin, have, in addition to anticoagulant, many other pharmacol. effects (i.e., reduction of intracellular Ca<sup>2+</sup> release; **antioxidant** effect; anti-inflammatory or neurotrophic effects) that could act in **synergy** to explain the neuroprotective activity of enoxaparin in acute neurodegenerative diseases. Finally, in different in-vivo models of acute neurodegenerative diseases, enoxaparin reduces brain edema and lesion size and improves

motor and **cognitive** recovery with a large therapeutic window of opportunity (compatible with a clin. use). Taking into account these exptl. data in models of ischemia and brain trauma, the clin. use of enoxaparin in acute neurodegenerative diseases warrants serious consideration.

REFERENCE COUNT: 84 THERE ARE 84 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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E1	3	SEIDMAN LISA A/AU
E2	1	SEIDMAN LISA ALISON/AU
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E20	2	SEIDMAN ROBERTA J/AU
E21	5	SEIDMAN S/AU
E22	1	SEIDMAN S F/AU
E23	1	SEIDMAN S L/AU
E24	1	SEIDMAN S M/AU

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	1	"SEIDMAN M D"/AU
	1	"SEIDMAN M H"/AU
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	1	"SEIDMAN MARC H"/AU
	16	"SEIDMAN MARTIN"/AU
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=> s l4 and (mitochondri?)

147650 MITOCHONDRI?

L5 11 L4 AND (MITOCHONDRI?)

=> d l5 1-11 ibib ed abs

L5 ANSWER 1 OF 11 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:1023005 CAPLUS

DOCUMENT NUMBER: 142:53926

TITLE: Role of Bcl-2 family of proteins in mediating apoptotic death of PC12 cells exposed to oxygen and

glucose deprivation

AUTHOR(S): Koubi, David; Jiang, Hao; Zhang, Lijie; Tang, Wenxue; Kuo, Jarret; Rodriguez, Alba I.; Hunter, Tangella Jackson; **Seidman, Michael D.**; Corcoran, George B.; Levine, Robert A.

CORPORATE SOURCE: William T. Gossett Neurology Laboratories, Detroit, MI, 48202, USA

SOURCE: Neurochemistry International (2004), Volume Date 2005, 46(1), 73-81  
CODEN: NEUIDS; ISSN: 0197-0186

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 29 Nov 2004

AB Apoptotic cell death has been observed in many in vivo and in vitro models of ischemia. However, the mol. pathways involved in ischemia-induced apoptosis remain unclear. We have examined the role of Bcl-2 family of proteins in mediating apoptosis of PC12 cells exposed to the conditions of oxygen and glucose deprivation (OGD) or OGD followed by restoration of oxygen and glucose (OGD-restoration, OGD-R). OGD decreased **mitochondrial** membrane potential and induced necrosis of PC12 cells, which were both prevented by the overexpression of Bcl-2 proteins. OGD-R caused apoptotic cell death, induced cytochrome C release from **mitochondria** and caspase-3 activation, decreased **mitochondrial** membrane potential, and increased levels of pro-apoptotic Bax translocated to the **mitochondrial** membrane, all of which were reversed by overexpression of Bcl-2. These results demonstrate that the cell death induced by OGD and OGD-R in PC12 cells is potentially mediated through the regulation of **mitochondrial** membrane potential by the Bcl-2 family of proteins. It also reveals the importance of developing therapeutic strategies for maintaining the **mitochondrial** membrane potential as a possible way of reducing necrotic and apoptotic cell death that occurs following an ischemic insult.

REFERENCE COUNT: 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:404998 CAPLUS

DOCUMENT NUMBER: 141:120554

TITLE: Age-related Hearing Loss and its Association with Reactive Oxygen Species and **Mitochondrial** DNA damage

AUTHOR(S): **Seidman, Michael D.**; Ahmad, Nadir; Joshi, Dipa; Seidman, Jake; Thawani, Sujatha; Quirk, Wayne S.

CORPORATE SOURCE: Henry Ford Health System, West Bloomfield, MI, USA

SOURCE: Acta Oto-Laryngologica, Supplement (2004), 552, 16-24  
CODEN: AOLSA5; ISSN: 0365-5237

PUBLISHER: Taylor & Francis

DOCUMENT TYPE: Journal; General Review

LANGUAGE: English

ED Entered STN: 19 May 2004

AB A review. Age-related hearing loss, known as presbycusis, is characterized by the progressive deterioration of auditory sensitivity associated with the aging process and is the leading cause of adult auditory deficiency in the USA. Presbycusis is described as a progressive, bilateral, high-frequency hearing loss that is manifested on audiometric assessment by a moderately sloping pure tone audiogram. Approx. 23% of the population between 65 and 75 yr of age, and 40% of the population older than 75 yr of age are affected by this condition. It was estimated in 1980 that 11% of the population was 76 yr or older and this number is expected to almost double by the year 2030. When one considers that the population over 65 yr of age is experiencing the most accelerated development of hearing loss, the potential socioeconomic ramifications are

staggering. Curiously, the frequency of presbycusis varies across different societies. This discrepancy has been attributed to many factors including genetics, diet, socioeconomic factors, and environmental variables. The purpose of this article is to review the various mol. mechanisms underlying presbycusis and to offer insights into potential methods of mitigating the effects of aging on hearing impairment.

REFERENCE COUNT: 79 THERE ARE 79 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 3 OF 11 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:376277 CAPLUS  
DOCUMENT NUMBER: 138:365152  
TITLE: Method of determining biological/molecular age  
INVENTOR(S): Seidman, Michael D.  
PATENT ASSIGNEE(S): USA  
SOURCE: U.S. Pat. Appl. Publ., 9 pp., Cont.-in-part of U.S. Ser. No. 885,732, abandoned.  
CODEN: USXXCO  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 2  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003092052	A1	20030515	US 2002-271469	20021015
US 2001055769	A1	20011227	US 2001-885732	20010620
PRIORITY APPLN. INFO.:			US 2000-212747P	P 20000620
			US 2001-885732	B2 20010620

ED Entered STN: 16 May 2003

AB Methods of obtaining a measurement indicative of oxidative stress and the mol. age of an individual include the step of detecting a **mitochondrial** DNA deletion and correlating the quantity of the deletion with a measurement of a parameter related to oxygen metabolism

L5 ANSWER 4 OF 11 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:232038 CAPLUS  
DOCUMENT NUMBER: 138:399824  
TITLE: Effect of SOD1 overexpression on age- and noise-related hearing loss  
AUTHOR(S): Coling, Donald E.; Yu, Kenneth C. Y.; Somand, David; Satar, Bulent; Bai, Uma; Huang, Ting-Ting; Seidman, Michael D.; Epstein, Charles J.; Mhatre, Anand N.; Lalwani, Anil K.  
CORPORATE SOURCE: Department of Otolaryngology--Head and Neck Surgery, Epstein Laboratories, Laboratory of Molecular Otology, University of California San Francisco, San Francisco, CA, 94143-0526, USA  
SOURCE: Free Radical Biology & Medicine (2003), 34(7), 873-880  
CODEN: FRBMEH; ISSN: 0891-5849  
PUBLISHER: Elsevier Science Inc.  
DOCUMENT TYPE: Journal  
LANGUAGE: English

ED Entered STN: 25 Mar 2003

AB Reactive oxygen species (ROS) have been implicated in hearing loss associated with aging and noise exposure. Superoxide dismutases (SODs) form a first line of defense against damage mediated by the superoxide anion, the most common ROS. Absence of Cu/Zn SOD (SOD1) has been shown to potentiate hearing loss related to noise exposure and age. Conversely, overexpression of SOD1 may be hypothesized to afford a protection from age- and noise-related hearing loss. This hypothesis may be tested using a transgenic mouse model carrying the human SOD1 gene. Contrary to expectations, here, we report that no protection against age-related hearing loss was observed in mice up to 7 mo of age or from noise-induced

hearing loss when 8 wk old mice were exposed to broadband noise (4-45 kHz, 110 dB for 1 h). **Mitochondrial** DNA deletion, an index of aging, was elevated in the acoustic nerve of transgenic mice compared to nontransgenic littermates. The results indicate the complexity of oxidative metabolism in the cochlea is greater than previously hypothesized.

REFERENCE COUNT: 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 5 OF 11 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:956200 CAPLUS

DOCUMENT NUMBER: 138:219020

TITLE: Molecular mechanisms of age-related hearing loss

AUTHOR(S): **Seidman, Michael D.**; Ahmad, Nadir; Bai, Uma

CORPORATE SOURCE: Department of Otolaryngology, Head & Neck Surgery,

Department of Otolaryngology, Division

Otologic/Neurotologic Surgery,

Complementary/Integrative Medicine, Henry Ford

Hospital System, Complementary/Integrative Medicine,

Bloomfield, MI, 48323, USA

SOURCE: Ageing Research Reviews (2002), 1(3), 331-343

CODEN: ARRGAJ; ISSN: 1568-1637

PUBLISHER: Elsevier Science B.V.

DOCUMENT TYPE: Journal; General Review

LANGUAGE: English

ED Entered STN: 18 Dec 2002

AB A review. Age-related hearing loss, known as presbycusis, is characterized by the progressive deterioration of auditory sensitivity associated with aging and is the most common cause of adult auditory deficiency in the United States. Presbycusis is defined as a progressive, bilateral, high-frequency hearing loss that is manifested on audiometric assessment by a moderately sloping pure tone audiogram. This condition affects approx. 23% of the population between 65 and 75 yr of age and 40% of the population older than 75 yr of age. In 1980, it was estimated that 11% of the population was 76 yr or older and this number is expected to nearly double by the year 2030. When coupled with the fact that the population over 65 yr of age is experiencing the most rapid progression of hearing loss, the potential socioeconomic ramifications are staggering. Interestingly, presbycusis varies in its frequency across differing societies. This discrepancy was attributed to many factors such as genetics, diet, socioeconomic factors, and environmental variables. The purpose of this discussion is to illuminate the various mol. mechanisms underlying this age-related hearing loss and to offer insights into potential ways to mitigate the effects of aging on hearing impairment.

REFERENCE COUNT: 75 THERE ARE 75 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 6 OF 11 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2001:936054 CAPLUS

DOCUMENT NUMBER: 136:32677

TITLE: Method of determining biological/molecular age

INVENTOR(S): **Seidman, Michael D.**

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 4 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2001055769	A1	20011227	US 2001-885732	20010620
US 2003092052	A1	20030515	US 2002-271469	20021015



PRIORITY APPLN. INFO.:

US 2000-212747P

P 20000620

US 2001-885732

B2 20010620

ED Entered STN: 28 Dec 2001

AB The mol. biol. age of an individual, as opposed to the chronol. age, is determined by extracting **mitochondrial** DNA from a phys. specimen from the individual, performing mol. biol. testing to detect aging deletions, quantifying the deletions and comparing the quantification with normative data for the quantification derived from a plurality of age groups of a population.

L5 ANSWER 7 OF 11 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2001:832448 CAPLUS

DOCUMENT NUMBER: 136:100607

TITLE: DNA repair and mutagenesis in Werner syndrome

AUTHOR(S): Bohr, Vilhelm A.; Pinto, Nadja Souza; Nyaga, Simon G.; Dianov, Grigory; Kraemer, Kenneth; **Seidman, Michael M.**; Brosh, Robert M., Jr.

CORPORATE SOURCE: Laboratory of Molecular Gerontology, National Institute on Aging, National Institutes of Health, Baltimore, MD, 21224, USA

SOURCE: Environmental and Molecular Mutagenesis (2001), 38(2/3), 227-234

CODEN: EMMUEG; ISSN: 0893-6692

PUBLISHER: Wiley-Liss, Inc.

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 16 Nov 2001

AB Werner syndrome (WS) is the hallmark premature aging syndrome in which the patients appear much older than their actual chronol. age. The disorder is associated with significantly increased genome instability and with transcriptional deficiencies. There has been some uncertainty about whether WS cells are defective in DNA repair. We thus examined repair in vitro in nuclear and **mitochondrial** DNA. Whereas cellular studies so far do not show significant DNA repair deficiencies, biochem. studies with the Werner protein clearly indicate that it plays a role in DNA repair.

REFERENCE COUNT: 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 8 OF 11 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2001:307907 CAPLUS

DOCUMENT NUMBER: 135:271196

TITLE: A specific **mitochondrial** DNA deletion (mtDNA4977) is identified in a pedigree of a family with hearing loss

AUTHOR(S): Bai, Uma; **Seidman, Michael D.**

CORPORATE SOURCE: Department of Otolaryngology-HNS, Henry Ford Heath System, Detroit, MI, 48322, USA

SOURCE: Hearing Research (2001), 154(1-2), 73-80

CODEN: HERED3; ISSN: 0378-5955

PUBLISHER: Elsevier Science B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 02 May 2001

AB This paper presents a family pedigree of sensorineural hearing loss in patients with a **mitochondrial** DNA (mtDNA) deletion. Genomic DNA screenings including myo 15 and connexin 26 were normal. MtDNA deletions are associated with many pathophysiol. conditions, including neurol. disorders, sensorineural hearing loss, ischemia, cardiomyopathies and aging. Several **mitochondrial** disorders secondary to mutations or deletions in mtDNA have been identified in association with deafness. The present study describes a pedigree of five individuals with hearing loss who harbor a 4977 bp common aging deletion, in their mtDNA. Chromosomal anal. was normal in all affected individuals. Audiol. and mol. biol.

findings of these patients suggest that the common aging deletion of mtDNA may be a predisposing factor in sensorineural hearing loss in this family.  
REFERENCE COUNT: 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 9 OF 11 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2000:352860 CAPLUS

DOCUMENT NUMBER: 133:134621

TITLE: Effects of dietary restriction and antioxidants on presbycusis

AUTHOR(S): Seidman, Michael D.

CORPORATE SOURCE: Department of Otolaryngology-Head and Neck Surgery, Henry Ford Health System, West Bloomfield, MI, USA

SOURCE: Laryngoscope (2000), 110(5, Pt. 1), 727-738

CODEN: LARYA8; ISSN: 0023-852X

PUBLISHER: Lippincott Williams & Wilkins

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 28 May 2000

AB Objectives/Hypothesis: The premise of this study is that the membrane hypothesis of aging, also known as the **mitochondrial** clock theory of aging, is the basis for presbycusis. Furthermore, it is proposed that treatment with antioxidants or dietary restriction can attenuate age-related hearing loss. Many studies have demonstrated a reduction in blood flow to specific tissues, including the cochlea, with aging. Hypoperfusion leads to the formation of reactive oxygen metabolites (ROM). ROM are highly toxic mols. that directly affect tissues including inner ear structures. In addition, ROM can damage **mitochondrial** DNA (mtDNA), resulting in the production of specific mtDNA deletions (mtDNA del4977 [human] or mtDNA del4834 [rat]; also known as the common aging deletion). Previous corroborating data suggest that the common aging deletion mtDNA4834 may be associated not only with aging but also with presbycusis, thus further strengthening the basis of the current studies. In this study, expts. provide compelling evidence that long-term treatment with compds. that block or scavenge reactive oxygen metabolites attenuate age-related hearing loss and reduce the impact of associated deleterious changes at the mol. level. Study Design: Prospective randomized study. Methods: One hundred thirty rats were randomly assigned to one of six groups with appropriate controls. Animals were divided into the following treatment arms: group 1, 30% caloric restriction; group 2, vitamin E oversupplementation; group 3, vitamin C oversupplementation; group 4, melatonin treatment; group 5, lazaroid treatment; and group 6, placebo. In addition, 10 animals were used to determine the appropriate caloric

restriction. All subjects underwent baseline and every-3-mo testing until their health failed (range, 18-28 mo; average, 25 mo). This testing included auditory sensitivity studies using auditory brainstem response (ABR) testing, as well as tissue anal. for mtDNA deletions using mol. biol. techniques. At the conclusion of the study, animals underwent a final ABR test and were tested for mtDNA deletions in brain and inner ear tissues, and the opposite ear was used for histol. anal. Results: Results indicated that the 30%-caloric-restricted group maintained the most acute auditory sensitivities, the lowest quantity of mtDNA deletions, and the least amount of outer hair cell loss. The antioxidant-treated subjects had improved auditory sensitivities, and a trend for fewer mtDNA deletions was observed compared with the placebo subjects. The placebo subjects had the poorest auditory sensitivity, the most mtDNA deletions, and the greatest degree of outer hair cell loss. Conclusions: Intervention designed to reduce reactive oxygen metabolite damage appears to protect against age-related hearing loss specifically and aging in general. This is reflected by an overall reduction in mtDNA deletions. These data also suggest that the common aging deletion appears to be associated with presbycusis, as demonstrated by an increased frequency of the mtDNA del4834 in the cochleae with the most significant hearing loss. Nutritional and

pharmacol. strategies may very well provide rational treatment options that would limit the age-associated increase in ROM generation, reduce mtDNA damage, and reduce the degree of hearing loss as the organism advances in age.

REFERENCE COUNT: 70 THERE ARE 70 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 10 OF 11 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1999:705000 CAPLUS

DOCUMENT NUMBER: 131:314225

TITLE: **Mitochondrial** function-enhancing nutritional supplement for improvement of auditory function

INVENTOR(S): **Seidman, Michael D.**

PATENT ASSIGNEE(S): USA

SOURCE: U.S., 7 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5977162	A	19991102	US 1997-931134	19970916
PRIORITY APPLN. INFO.:			US 1996-26162P	P 19960916

ED Entered STN: 04 Nov 1999

AB A nutritional supplement for enhancing **mitochondrial** function in cells includes 10-1000 mg of alpha-lipoic acid, 10-1000 mg acetyl-L-carnitine, 15-360 mg coenzyme Q-10, and 15-360 mg glutathione. The composition may further comprise a carrier for these components such as a liquid or tablet for oral ingestion on a daily basis.

REFERENCE COUNT: 78 THERE ARE 78 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 11 OF 11 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1997:28192 CAPLUS

DOCUMENT NUMBER: 126:140258

TITLE: Association of **mitochondrial** DNA deletions and cochlear pathology: A molecular biology tool

AUTHOR(S): **Seidman, Michael D.**; Bai, Uma; Khan, Mumtaz J.; Murphy, Michael P.; Quirk, Wayne S.; Castora, Frank J.; Hinojosa, Raul

CORPORATE SOURCE: Department of Otolaryngology (M.D.S., M.J.K., M.P.M., U.B.), Henry Ford Hospital, Detroit, USA

SOURCE: Laryngoscope (1996), 106(6), 777-783

CODEN: LARYA8; ISSN: 0023-852X

PUBLISHER: American Laryngological, Rhinological and Otological Society, Inc.

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 16 Jan 1997

AB The purpose of these expts. was to develop a method of isolation, amplification, and identification of cochlear **mitochondrial** DNA (mtDNA) from minute quantities of tissue. Addnl., studies were designed to detect mtDNA deletions (mtDNA del) from the cochlea that previously have been amplified from other organ systems and tissues. MtDNA del have been associated with many pathologies, including neurol. disorders, sensorineural hearing loss, ischemia, cardiomyopathies, and aging. DNA was extracted from rat and human tissues, and polymerase chain reaction was used to amplify mtDNA sequences. A 360 base pair (bp) cytochrome-b gene product and the highly conserved ND1-16S rRNA regions found only in mtDNA were amplified from all tissues. Preliminary studies have identified a 4834 bp mtDNA del in aged rats and a corresponding 4977 bp mtDNA del in aged humans. Addnl., preliminary results in human archival temporal bone

studies reveal the presence of the 4977-bp mtDNA deletion in two out of three patients with presbycusis. The deletion was not evident in age-matched control patients without a history of presbycusis. This technique of mtDNA identification makes it possible to investigate specific mtDNA defects from a single cochlea, promoting the study of hereditary hearing loss and presbycusis at a mol. biol. level.

REFERENCE COUNT: 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d his

(FILE 'HOME' ENTERED AT 09:45:47 ON 23 MAR 2005)

FILE 'CAPLUS' ENTERED AT 09:45:52 ON 23 MAR 2005

L1 9392 S SYNERGY  
L2 152 S SYNERGY AND (ANTIOXIDANT? OR LIPOIC ACID? OR "ACETYL-L-CARNIT  
L3 2 S L2 AND (COGNITIVE OR COGNITION OR AUDITORY OR HEARING)  
E SEIDMAN M/AU  
L4 141 S E3-E12  
L5 11 S L4 AND (MITOCHONDRI?)

=> s 14 and (antioxidant?)  
123295 ANTIOXIDANT?

L6 4 L4 AND (ANTIOXIDANT?)

=> s 16 not 15

L7 1 L6 NOT L5

=> d 17 ibib ed abs

L7 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1999:289292 CAPLUS

DOCUMENT NUMBER: 130:332163

TITLE: Glutamate antagonists, steroids, and  
**antioxidants** as therapeutic options for  
hearing loss and tinnitus and the use of an inner ear  
drug delivery system

AUTHOR(S): **Seidman, Michael D.**

CORPORATE SOURCE: Department of Otolaryngology-Head and Neck Surgery,  
Tinnitus Clinic, Henry Ford Health System, W.  
Bloomfield, MI, 48323, USA

SOURCE: International Tinnitus Journal (1998), 4(2), 148-154  
CODEN: ITJOF9; ISSN: 0946-5448

PUBLISHER: Tinnitus Center, State University of New York

DOCUMENT TYPE: Journal; General Review

LANGUAGE: English

ED Entered STN: 11 May 1999

AB A review with 42 refs. A wealth of anecdotal, empirical, and double-blind, placebo-controlled data exists on medicines that may have a beneficial role in the management of patients with tinnitus. Tinnitus is a symptom that affects between 40 and 45 million Americans alone; this represents approx. 14% of the US population. Data exist for Japan (population: 125,732,794), Europe (population: 503 million), and Australia (population: 18,426,900), and ests. suggest that tinnitus affects a similar percentage of those populations (B. Tabachnick, personal communication, 1998). Thus, in those industrialized nations, approx. 90 million may experience tinnitus to some degree. One to two percent of the population experiences debilitating tinnitus, severely limiting the quality of life of affected individuals. All too often, the response from well-trained medical professionals is, "Learn to live with it" or "There is no cure.". Although the author does not dispute that currently no cure exists, I contend that help is available. This article discusses the use of glutamate antagonists, steroids, and **antioxidants** for the

management of hearing loss and tinnitus. Addnl., the results of using an inner ear drug delivery system on nine patients with a variety of inner ear disorders are reviewed briefly.

REFERENCE COUNT: 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> s 14 and (resveratrol? or lipoic acid? or "acetyl-L-carnitine" or lecithin? or "N-acetyl cysteine")

2256 RESVERATROL?  
3317 LIPOIC  
4627513 ACID?  
3275 LIPOIC ACID?  
(LIPOIC(W)ACID?)  
146459 "ACETYL"  
63 "ACETYLS"  
146494 "ACETYL"  
( "ACETYL" OR "ACETYLS" )  
1394892 "L"  
9524 "CARNITINE"  
318 "CARNITINES"  
9541 "CARNITINE"  
( "CARNITINE" OR "CARNITINES" )  
616 "ACETYL-L-CARNITINE"  
( "ACETYL" (W) "L" (W) "CARNITINE" )  
1 LECITHIN?  
2782225 "N"  
146459 "ACETYL"  
63 "ACETYLS"  
146494 "ACETYL"  
( "ACETYL" OR "ACETYLS" )  
94754 "CYSTEINE"  
5243 "CYSTEINES"  
96816 "CYSTEINE"  
( "CYSTEINE" OR "CYSTEINES" )  
811 "N-ACETYL CYSTEINE"  
( "N" (W) "ACETYL" (W) "CYSTEINE" )

L8 1 L4 AND (RESVERATROL? OR LIPOIC ACID? OR "ACETYL-L-CARNITINE" OR LECITHIN? OR "N-ACETYL CYSTEINE")

=> d 18

L8 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1999:705000 CAPLUS

DN 131:314225

TI Mitochondrial function-enhancing nutritional supplement for improvement of auditory function

IN Seidman, Michael D.

PA USA

SO U.S., 7 pp.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	US 5977162	A	19991102	US 1997-931134	19970916
PRAI	US 1996-26162P	P	19960916		

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FULL ESTIMATED COST	0.12	119.44
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 FILE LAST UPDATED: 22 Mar 2005 (20050322/ED)

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FILE 'CAPLUS' ENTERED AT 09:45:52 ON 23 MAR 2005

L1	9392 S SYNERGY
L2	152 S SYNERGY AND (ANTIOXIDANT? OR LIPOIC ACID? OR "ACETYL-L-CARNIT
L3	2 S L2 AND (COGNITIVE OR COGNITION OR AUDITORY OR HEARING) E SEIDMAN M/AU
L4	141 S E3-E12
L5	11 S L4 AND (MITOCHONDRI?)
L6	4 S L4 AND (ANTIOXIDANT?)
L7	1 S L6 NOT L5
L8	1 S L4 AND (RESVERATROL? OR LIPOIC ACID? OR "ACETYL-L-CARNITINE"

FILE 'STNGUIDE' ENTERED AT 09:56:12 ON 23 MAR 2005

FILE 'CAPLUS' ENTERED AT 09:57:26 ON 23 MAR 2005

=> file registry

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.45	119.89
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-9.49

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STRUCTURE FILE UPDATES: 22 MAR 2005 HIGHEST RN 847018-75-1

DICTIONARY FILE UPDATES: 22 MAR 2005 HIGHEST RN 847018-75-1

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\*  
\* The CA roles and document type information have been removed from \*  
\* the IDE default display format and the ED field has been added, \*  
\* effective March 20, 2005. A new display format, IDERL, is now \*  
\* available and contains the CA role and document type information. \*  
\*  
\*\*\*\*\*

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:  
<http://www.cas.org/ONLINE/DBSS/registryss.html>

=> e alpha lipoic acid/cn

E1	2	ALPHA KETO ACID DEHYDROGENASE COMPLEX, E3 COMPONENT, LIPOAMIDE DEHYDROGENASE (WOLBACHIA PIPIENTIS STRAIN WMEL GENE LPDA)/CN
E2	1	ALPHA LIPID 300/CN
E3	0 -->	ALPHA LIPOIC ACID/CN
E4	1	ALPHA MANNOSIDASE (SYNECHOCOCCUS STRAIN WH8102 GENE SYNW0267)/CN
E5	1	ALPHA MANNOSIDASE 6A8B (HUMAN GENE 6A8B)/CN
E6	1	ALPHA MANNOSIDASE II ISOZYME (HUMAN CELL LINE SK-MEL-28 CLON E PMX6)/CN
E7	1	ALPHA MANNOSIDASE II ISOZYME (HUMAN CELL LINE SK-MEL-28)/CN
E8	1	ALPHA MATING PHEROMONE (SACCHAROMYCES NAGANISHII GENE MFALPH A1 PRECURSOR)/CN
E9	1	ALPHA MEDOPA/CN
E10	1	ALPHA METALS 171/CN
E11	1	ALPHA MS/CN
E12	1	ALPHA NAC (ARABIDOPSIS THALIANA GENE F7L13.60)/CN

=> e thioctic acid/cn

E1	1	THIOCTAMIDE/CN
----	---	----------------

E2	1	THIOCTAN/CN
E3	1 -->	THIOCTIC ACID/CN
E4	1	THIOCTIC ACID AMIDE/CN
E5	1	THIOCTIC ACID N-HYDROXYSUCCINIMIDE ESTER/CN
E6	1	THIOCTIC ACID SALT WITH L-CARNITINE/CN
E7	1	THIOCTIC ACID, DIHYDRO-/CN
E8	1	THIOCTIC ACID, SODIUM SALT/CN
E9	1	THIOCTIC AMIDE/CN
E10	1	THIOCTSAN/CN
E11	1	THIOCUPRATE (CU(SH)3S3-)/CN
E12	1	THIOCUPRATE (CU(SH)42-)/CN

=> s e3

L9	1	"THIOCTIC ACID"/CN
----	---	--------------------

=> e acetyl-l-carnitine/cn

E1	1	ACETYL-L-ALANYLGLYCYLGLYCINE METHYL ESTER/CN
E2	1	ACETYL-L-ASPARTIC ACID/CN
E3	1 -->	ACETYL-L-CARNITINE/CN
E4	1	ACETYL-L-CARNITINE ACID PHOSPHATE/CN
E5	1	ACETYL-L-CARNITINE ACID SULFATE/CN
E6	1	ACETYL-L-CARNITINE GLUCOSE PHOSPHATE/CN
E7	1	ACETYL-L-CARNITINE GLYCEROPHOSPHATE/CN
E8	1	ACETYL-L-CARNITINE LACTATE/CN
E9	1	ACETYL-L-CARNITINE MAGNESIUM CITRATE/CN
E10	1	ACETYL-L-CARNITINE METHANESULFONATE/CN
E11	1	ACETYL-L-CARNITINE OROTATE/CN
E12	1	ACETYL-L-CARNITINE TRICHLOROACETATE/CN

=> s e3

L10	1	ACETYL-L-CARNITINE/CN
-----	---	-----------------------

=> e resveratrol/cn

E1	1	RESUSCITATION-PROMOTING FACTOR PROTEIN (MICROCOCCUS LUTEUS S TRAIN JCM-3348)/CN
E2	1	RESUSCITATION-PROMOTING FACTOR PROTEIN (MICROCOCCUS LUTEUS S TRAIN NCIMB-13267)/CN
E3	1 -->	RESVERATROL/CN
E4	1	RESVERATROL B-D-GLUCOSIDE/CN
E5	1	RESVERATROL 12-C-B-GLUCOPYRANOSIDE/CN
E6	1	RESVERATROL 3-O-B-GLUCOPYRANOSIDE/CN
E7	1	RESVERATROL 4'-O-B-D-GLUCOPYRANOSIDE/CN
E8	1	RESVERATROL CIS-DEHYDRODIMER/CN
E9	1	RESVERATROL GLUCOSIDE/CN
E10	1	RESVERATROL SYNTHASE/CN
E11	1	RESVERATROL SYNTHASE (ARACHIS HYPOGAEA CLONE PRS-JP1 GENE RS 3) (E.C.2.3.1.95)/CN
E12	1	RESVERATROL SYNTHASE (PEANUT)/CN

=> s e3

L11	1	RESVERATROL/CN
-----	---	----------------

=> e lecithin/cn

E1	1	LECITASE NOVO/CN
E2	1	LECITASE ULTRA/CN
E3	0 -->	LECITHIN/CN
E4	1	LECITHIN 5F-UB/CN
E5	1	LECITHIN CHOLESTEROL ACYLTRANSFERASE (MOUSE STRAIN FVB/N CLO NE MGC:25630 IMAGE:4212194)/CN
E6	1	LECITHIN DISTEARYL ETHER/CN
E7	1	LECITHIN DX/CN
E8	1	LECITHIN H/CN
E9	1	LECITHIN ISOPROPYL PALMITATE/CN
E10	1	LECITHIN RETINOL ACYLTRANSFERASE (PHOSPHATIDYLCHOLINE--RETIN



OL O-ACYLTRANSFERASE) (HUMAN CLONE MGC:33103 IMAGE:5272486)/CN

E11 1 LECITHIN RETINOL ACYLTRANSFERASE (XENOPUS TROPICALIS CLONE MGC:75880 IMAGE:5383085 GENE MGC75880)/CN

E12 1 LECITHIN-CHOLESTEROL ACYLTRANSFERASE/CN

=> e

E13 1 LECITHIN-CHOLESTEROL ACYLTRANSFERASE (ACOMYS CAHIRINUS T-167 0 GENE LCAT FRAGMENT)/CN

E14 1 LECITHIN-CHOLESTEROL ACYLTRANSFERASE (AKODON TORQUES GENE LCAT EXON 6 FRAGMENT)/CN

E15 1 LECITHIN-CHOLESTEROL ACYLTRANSFERASE (ALLACTAGA ELATER T-104 5 GENE LCAT FRAGMENT)/CN

E16 1 LECITHIN-CHOLESTEROL ACYLTRANSFERASE (CALOMYSCUS MYSTAX T-1067 GENE LCAT FRAGMENT)/CN

E17 1 LECITHIN-CHOLESTEROL ACYLTRANSFERASE (CLETHRIONOMYS GLAREOLUS GENE LCAT EXON 6 FRAGMENT)/CN

E18 1 LECITHIN-CHOLESTEROL ACYLTRANSFERASE (CRICETULUS MIGRATORIUS GENE LCAT EXON 6 FRAGMENT)/CN

E19 1 LECITHIN-CHOLESTEROL ACYLTRANSFERASE (DENDROMUS MYSTACALIS T-1422 GENE LCAT FRAGMENT)/CN

E20 1 LECITHIN-CHOLESTEROL ACYLTRANSFERASE (DEOMYS FERRUGINEUS T-778 GENE LCAT FRAGMENT)/CN

E21 1 LECITHIN-CHOLESTEROL ACYLTRANSFERASE (DICROSTONYX TORQUATUS T-1337 GENE LCAT FRAGMENT)/CN

E22 1 LECITHIN-CHOLESTEROL ACYLTRANSFERASE (DIPUS SAGITTA T-869 GENE LCAT FRAGMENT)/CN

E23 1 LECITHIN-CHOLESTEROL ACYLTRANSFERASE (ELIOMYS QUERCINUS GENE LCAT EXON 6 FRAGMENT)/CN

E24 1 LECITHIN-CHOLESTEROL ACYLTRANSFERASE (GERBILLUS HENLEYI GENE LCAT EXON 6 FRAGMENT)/CN

=> e n-acetyl cysteine/cn

E1 1 N-ACETYL CARBARYL/CN

E2 1 N-ACETYL CROTYLGLYCINE/CN

E3 0 --> N-ACETYL CYSTEINE/CN

E4 1 N-ACETYL GABA/CN

E5 1 N-ACETYL GALACTOSAMINIDASE, ALPHA (MOUSE STRAIN CZECH II CLONE MGC:13811 IMAGE:4019197)/CN

E6 1 N-ACETYL GEISSMAN-WAISS LACTONE/CN

E7 1 N-ACETYL GLUCOSAMINE PHOSPHATE MUTASE (PLASMODIUM FALCIPARUM STRAIN 3D7 GENE PF11-0311)/CN

E8 1 N-ACETYL GLUCOSAMINE-1-PHOSPHATE URIDYLTRANSFERASE (ESCHERICHIA COLI O157:H7 STRAIN EDL933 GENE GLMU)/CN

E9 1 N-ACETYL GLUCOSAMINE-1-PHOSPHATE URIDYLTRANSFERASE (ESCHERICHIA COLI STRAIN O157:H7 GENE ECS4672)/CN

E10 1 N-ACETYL GLUCOSAMINE-1-PHOSPHATE URIDYLTRANSFERASE (SHIGELLA FLEXNERI STRAIN 2457T GENE GLMU)/CN

E11 1 N-ACETYL GLUCOSAMINE-1-PHOSPHATE URIDYLTRANSFERASE (SHIGELLA FLEXNERI STRAIN 301 GENE GLMU)/CN

E12 1 N-ACETYL GLUCOSAMINE-1-PHOSPHATE URIDYLTRANSFERASE (YERSINIA PESTIS STRAIN KIM GENE GLMU)/CN

=> e acetyl cysteine/cn

E1 1 ACETYL CYCLOHEXYLSULFONYL PEROXIDE/CN

E2 1 ACETYL CYCLOPENTYLSULFONYL PEROXIDE/CN

E3 0 --> ACETYL CYSTEINE/CN

E4 1 ACETYL DAPHNORETIN/CN

E5 1 ACETYL DECYL PHOSPHATE/CN

E6 1 ACETYL DEHYDROABIETATE/CN

E7 1 ACETYL DEXTRAN/CN

E8 1 ACETYL DIBUTYL PHOSPHITE/CN

E9 1 ACETYL DIETHYL PHOSPHITE/CN

E10 1 ACETYL DIISOPROPYL PHOSPHITE/CN

E11 1 ACETYL DIMETHYL PHOSPHATE/CN  
E12 1 ACETYL DIMETHYL PHOSPHITE/CN

=> e acetylcysteine/cn

E1 1 ACETYLCYNOGLOSSOPHINE/CN  
E2 1 ACETYLCYSTEAMINE/CN  
E3 1 --> ACETYLCYSTEINE/CN  
E4 1 ACETYLCYTOCHALASIN H/CN  
E5 1 ACETYLDACTYLOIDIN/CN  
E6 1 ACETYLDAPSONE/CN  
E7 1 ACETYLDAUNOMYCIN/CN  
E8 1 ACETYLDEAMINO-COA/CN  
E9 1 ACETYLDECARBAMOYLSAXITOXIN/CN  
E10 1 ACETYLDEGLUCOPTEROCEREINE HYDROCHLORIDE/CN  
E11 1 ACETYLDEHYDRO-3-(2-FURYL)ALANYLTYROSINE/CN  
E12 1 ACETYLDEHYDRO-3-(2-THIENYL)ALANYLTYROSINE/CN

=> s e3

L12 1 ACETYLCYSTEINE/CN

=> d his

(FILE 'HOME' ENTERED AT 09:45:47 ON 23 MAR 2005)

FILE 'CAPLUS' ENTERED AT 09:45:52 ON 23 MAR 2005

L1 9392 S SYNERGY  
L2 152 S SYNERGY AND (ANTIOXIDANT? OR LIPOIC ACID? OR "ACETYL-L-CARNIT  
L3 2 S L2 AND (COGNITIVE OR COGNITION OR AUDITORY OR HEARING)  
E SEIDMAN M/AU  
L4 141 S E3-E12  
L5 11 S L4 AND (MITOCHONDRI?)  
L6 4 S L4 AND (ANTIOXIDANT?)  
L7 1 S L6 NOT L5  
L8 1 S L4 AND (RESVERATROL? OR LIPOIC ACID? OR "ACETYL-L-CARNITINE"

FILE 'STNGUIDE' ENTERED AT 09:56:12 ON 23 MAR 2005

FILE 'CAPLUS' ENTERED AT 09:57:26 ON 23 MAR 2005

FILE 'REGISTRY' ENTERED AT 09:57:38 ON 23 MAR 2005

E ALPHA LIPOIC ACID/CN  
E THIOCTIC ACID/CN  
L9 1 S E3  
E ACETYL-L-CARNITINE/CN  
L10 1 S E3  
E RESVERATROL/CN  
L11 1 S E3  
E LECITHIN/CN  
E N-ACETYL CYSTEINE/CN  
E ACETYL CYSTEINE/CN  
E ACETYLCYSTEINE/CN  
L12 1 S E3

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FILE COVERS 1907 - 23 Mar 2005 VOL 142 ISS 13  
FILE LAST UPDATED: 22 Mar 2005 (20050322/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

```
=> s 19
L13      1450 L9

=> s 110
L14      826 L10

=> s 111
L15      1859 L11

=> s 112
L16      5712 L12

=> s lecithin? or phosphatidyl choline? or phosphatidylcholine? or (choline (W)
phosphoglyceride?) or (choline (W) glycerophospholipid?)
  38776 LECITHIN?
  4381 PHOSPHATIDYL
    4 PHOSPHATIDYLS
  4384 PHOSPHATIDYL
    (PHOSPHATIDYL OR PHOSPHATIDYLS)
104615 CHOLINE?
  1109 PHOSPHATIDYL CHOLINE?
    (PHOSPHATIDYL(W)CHOLINE?)
  47555 PHOSPHATIDYLCHOLINE?
  48333 CHOLINE
    379 CHOLINES
  48485 CHOLINE
    (CHOLINE OR CHOLINES)
  1288 PHOSPHOGLYCERIDE?
    252 CHOLINE (W) PHOSPHOGLYCERIDE?
  48333 CHOLINE
    379 CHOLINES
  48485 CHOLINE
    (CHOLINE OR CHOLINES)
  2276 GLYCEROPHOSPHOLIPID?
    161 CHOLINE (W) GLYCEROPHOSPHOLIPID?
L17      78314 LECITHIN? OR PHOSPHATIDYL CHOLINE? OR PHOSPHATIDYLCHOLINE? OR
    (CHOLINE (W) PHOSPHOGLYCERIDE?) OR (CHOLINE (W) GLYCEROPHOSPHOLI
    PID?)

=> s (19 or 110) and 111 and 117 and 112
      1450 L9
      826 L10
      1859 L11
```

5712 L12

L18 3 (L9 OR L10) AND L11 AND L17 AND L12

=> d 118 1-3 ibib ed abs

L18 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:271056 CAPLUS

DOCUMENT NUMBER: 136:299719

TITLE: Dietary supplement for promoting healthy hormonal balance

INVENTOR(S): Hastings, Carl W.; Barnes, David J.; Daley, Christine A.

PATENT ASSIGNEE(S): Reliv' International, Inc., USA

SOURCE: U.S., 5 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6368617	B1	20020409	US 2001-858047	20010515
PRIORITY APPLN. INFO.:			US 2001-858047	20010515

ED Entered STN: 11 Apr 2002

AB A dietary supplement for promoting healthy hormonal balance in adult human subjects, and especially in elderly subjects, comprises a secretagogue for stimulating the release of human growth hormone (hGH) by the pituitary, and the conversion by hGH to insulin-like growth factor 1 (IGF-1), in combination with 7-keto-dehydroepiandrosterone (7-keto DHEA). The dietary supplement also includes other interacting ingredients for delivering antioxidants for retarding damage at the cellular level caused by the presence of free radicals, and natural herbs for promoting physiol. health. For example, an essentially dry powder constituting a dietary supplement of this invention, to be dissolved in water to provide a daily serving, contained 7-keto-DHEA 25 mg, Symbiotropin 1000 mg, **lecithin** 200 mg, maltodextrin 7.227 mg, citric acid 640 mg, dipotassium phosphate 25 mg, potassium citrate 25 mg, probiotic blend 100 mg, fruco-oligosaccharides 400 mg, S-adenosyl-L-methionine 5 mg, acetyl-L-carnitine 100 mg, omega-3 fatty acids (Dry n-3) 125 mg, trimethylglycine 100 mg, coenzyme Q10 7.5 mg, resveratrol (Protykin) 10 mg,  $\alpha$ -lipoic acid 50 mg, L-glutathione 30 mg, N-acetylcysteine 200 mg, and flavoring agents 300 mg.

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2001:741547 CAPLUS

DOCUMENT NUMBER: 135:293963

TITLE: Oral pharmaceuticals containing coenzyme Q with high dissolution qualities

INVENTOR(S): Chopra, Raj K.

PATENT ASSIGNEE(S): USA

SOURCE: U.S., 11 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6300377	B1	20011009	US 2001-790783	20010222
CA 2432020	AA	20020906	CA 2002-2432020	20020220

WO 2002067864 A2 20020906 WO 2002-US5970 20020220  
 WO 2002067864 A3 20021219  
 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,  
 CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,  
 GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,  
 LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,  
 PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,  
 UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,  
 CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,  
 BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG  
 EP 1505958 A2 20050216 EP 2002-721189 20020220  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

PRIORITY APPLN. INFO.: US 2001-790783 A 20010222  
 WO 2002-US5970 W 20020220

ED Entered STN: 11 Oct 2001

AB The present invention relates to a composition in liquid dosage form of coenzyme

Q or ubiquinone which can be formulated into cosmetic, dietary supplement or pharmaceutical dosage form for administration to patients. The dosage form comprises an effective amount of coenzyme Q or ubiquinone ranging from about 0.05 to about 15, more preferably about 1 to about 10.0 by weight of the composition in combination with a polysorbate surfactant such as a Tween®, surfactant, a vegetable oil or triglyceride, in further combination with a glyceryl ester in amts. effective to produce a liquid dosage form. Optional additives include a phospholipid such as hydroxylated **lecithin**, among others such as tocopherols or tocopherol esters effective to solubilize the ubiquinone in combination as well as other bioactive agents. Comps. according to the present invention avoid the inclusion of a polyhydric alc. solvent in solubilizing amts. A liquid dosage form contained coenzyme Q10 7, Tween 80 (Polysorbate 80) 38, Tributyrin (Glyceryl tributyrate) 19, medium chain triglycerides 19, and vitamin E alc. (or acetate) 17%. The formulation resulted in 100% dissoln.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2001:545461 CAPLUS

DOCUMENT NUMBER: 135:127168

TITLE: Reduced form of coenzyme Q in highly bioavailable stable dosage forms

INVENTOR(S): Chopra, Raj K.

PATENT ASSIGNEE(S): USA

SOURCE: PCT Int. Appl., 50 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001052822	A1	20010726	WO 2001-US1997	20010118
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			

US 6740338 B1 20040525 US 2000-488332 20000120  
 CA 2397447 AA 20010726 CA 2001-2397447 20010118  
 EP 1251834 A1 20021030 EP 2001-942547 20010118  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

PRIORITY APPLN. INFO.: US 2000-488332 A 20000120  
 US 2000-637559 A 20000811  
 WO 2001-US1997 W 20010118

OTHER SOURCE(S): MARPAT 135:127168

ED Entered STN: 27 Jul 2001

AB The present invention relates to a reduced form of coenzyme Q also known as ubiquinol in a pharmaceutical or cosmetic dosage form, preferably an oral dosage form such as a gelatin capsule. Comps. according to the present invention show high bioavailability of the reduced form of Coenzyme Q. The present invention relates to storage stable comps. comprising effective amts. of ubiquinol in combination with an amount of a reducing agent effective to maintain ubiquinol in its reduced state when formulated as in, e.g., capsules, tablets and other orally administrable form. A capsule formulation contained vitamin E acetate 6, hydroxylated **lecithin 4, phosphatidylcholine 32**, medium-chain triglyceride 20, Gelucire 30, coenzyme Q10 4, and ascorbyl palmitate 4%.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> s 19 and 111 and 117 and 112

1450 L9  
 1859 L11  
 5712 L12

L19 0 L9 AND L11 AND L17 AND L12

=> s 110 and 111 and 117 and 112

826 L10  
 1859 L11  
 5712 L12

L20 3 L10 AND L11 AND L17 AND L12

=> s 120 not 118

L21 0 L20 NOT L18

=> s 19 and 111

1450 L9  
 1859 L11

L22 2 L9 AND L11

=> d 122 1-2

L22 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:633437 CAPLUS

DN 141:170044

TI Oral compositions and methods for treatment of adverse effects or radiation

IN Rosenbloom, Richard A.

PA The Quigley Corporation, USA

SO PCT Int. Appl., 26 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004064725	A2	20040805	WO 2003-US39341	20031210
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,				

GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,  
 LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,  
 PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA,  
 UG, UZ, VN, YU, ZA, ZM, ZW  
 RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,  
 BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,  
 ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK,  
 TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRAI US 2003-341508 A 20030113

L22 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2000:645846 CAPLUS

DN 133:242652

TI Pharmaceutical, dietetic and cosmetic compositions based on tioctic acid and cysteine

IN Dall'aglio, Roberto; Borgonovo, Margherita; Introini, Carlo; Melegari, Pierangelo

PA Uni-Ci S.R.L., Italy

SO PCT Int. Appl., 48 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000053176	A1	20000914	WO 2000-EP1637	20000228
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	IT 1312377	B1	20020415	IT 1999-MI460	19990305
	EP 1156802	A1	20011128	EP 2000-907644	20000228
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	EP 1072310	A3	20030108	EP 2000-113660	20000628
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
PRAI	IT 1999-MI460	A	19990305		
	WO 2000-EP1637	W	20000228		

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d 122 2 abs

L22 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2005 ACS on STN

AB Novel pharmaceutical, dietetic and cosmetic compns., based on tioctic acid and cysteine and/or a pharmaceutically, dietetically or cosmetically acceptable derivative thereof, useful for the prevention and treatment of conditions caused by oxidative stresses and alterations of both aerobic and anaerobic energetic metabolism by activation of mitochondrial energetic enzyme systems (glycolysis and lipolysis) are described. Capsules were filled with N-acetylcysteine (I) 200, magnesium hydroxide 150, and tioctic acid (II) 200 mg. Capsules were orally administered to athletes for 60 days at 10 mg/kg/day of I and II. There was a decrease of 4% in body weight and 7% in body fat and an improvement of 3% proteic mass of muscles.

=> file medline biosis caplus embase wpids

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
FULL ESTIMATED COST	ENTRY	SESSION
	31.32	170.90
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
CA SUBSCRIBER PRICE	ENTRY	SESSION
	-2.92	-12.41

FILE 'MEDLINE' ENTERED AT 10:05:12 ON 23 MAR 2005

FILE 'BIOSIS' ENTERED AT 10:05:12 ON 23 MAR 2005

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FILE 'CAPLUS' ENTERED AT 10:05:12 ON 23 MAR 2005

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FILE 'EMBASE' ENTERED AT 10:05:12 ON 23 MAR 2005

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FILE 'WPIDS' ENTERED AT 10:05:12 ON 23 MAR 2005

COPYRIGHT (C) 2005 THE THOMSON CORPORATION

=> s (alpha lipoic acid?) or (lipoic acid?) or thioctic acid? or  
"1,2-dithiolane-3-pentanoic acid"

3 FILES SEARCHED...

L23 10890 (ALPHA LIPOIC ACID?) OR (LIPOIC ACID?) OR THIOCTIC ACID? OR  
"1,2-DITHIOLANE-3-PENTANOIC ACID"

=> s resveratrol? or "ko-jo-kon" or "3,4',5-stilbenetriol" or  
"3,5,4'-trihydroxystilbene" or (trans (W) resveratrol?) or (resveratrol sulfate?)  
or (resveratrol sulphate?) or polyphenol? or (red grape extract?) or (grape skin  
extract?)

L24 58333 RESVERATROL? OR "KO-JO-KON" OR "3,4',5-STILBENETRIOL" OR "3,5,4'  
-TRIHYDROXYSTILBENE" OR (TRANS (W) RESVERATROL?) OR (RESVERATROL  
SULFATE?) OR (RESVERATROL SULPHATE?) OR POLYPHENOL? OR (RED  
GRAPE EXTRACT?) OR (GRAPE SKIN EXTRACT?)

=> s (phosphatidyl (W) choline?) or (phosphatidylcholine?) or (choline (W)  
phosphoglyceride?) or lecithin? or (choline (W) glycerophospholipid?)

L25 198733 (PHOSPHATIDYL (W) CHOLINE?) OR (PHOSPHATIDYLCHOLINE?) OR (CHOLIN  
E (W) PHOSPHOGLYCERIDE?) OR LECITHIN? OR (CHOLINE (W) GLYCEROPHO  
SPHOLIPID?)

=> s acetylcarnitine? or (acetyl (W) carnitine?) or medosan? or  
"acetyl-L-carnitine" or alcar? or branigen? or (levocarnitine (W) acetyl?)

L26 5261 ACETYLCARNITINE? OR (ACETYL (W) CARNITINE?) OR MEDOSAN? OR "ACET  
YL-L-CARNITINE" OR ALCAR? OR BRANIGEN? OR (LEVOCARNITINE (W)  
ACETYL?)

=> s acetylcystein? or mercapturic acid? or acemuc? or acetabs? or acetylin? or  
acetyst? or airbron? or alveolex? or azubronchin? or bisolvon? or bromuc? or  
"broncho-fips" or broncholysin? or broncoclar? or codotussyl? or cystamucil? or  
(dampe (W) mucopect)

L27 32758 ACETYLCYSTEIN? OR MERCAPTURIC ACID? OR ACEMUC? OR ACETABS? OR  
ACETYLIN? OR ACETYST? OR AIRBRON? OR ALVEOLEX? OR AZUBRONCHIN?  
OR BISOLVON? OR BROMUC? OR "BRONCHO-FIPS" OR BRONCHOLYSIN? OR  
BRONCOCLAR? OR CODOTUSSYL? OR CYSTAMUCIL? OR (DAMPO (W) MUCOPECT  
)

=> s eurespiran? or exomuc? or fabrol? or fluimicil? or fluprowit? or frekatuss? or  
genax? or hoestil? or ilube? or jenacystein? or jenapharm? or lantamed? or larylin?  
or lindocetyl? or "M-Pectil" or muciteran? or (muco sanigen?) or mucomyst? or  
mucosil? or mucosol?



L28 1478 EURESPIRAN? OR EXOMUC? OR FABROL? OR FLUIMICIL? OR FLUPROWIT?  
OR FREKATUSS? OR GENAX? OR HOESTIL? OR ILUBE? OR JENACYSSTEIN?  
OR JENAPHARM? OR LANTAMED? OR LARYLIN? OR LINDOCETYL? OR "M-PECT  
IL" OR MUCITERAN? OR (MUCO SANIGEN?) OR MUCOMYST? OR MUCOSIL?  
OR MUCOSOL?

=> s mucosolvin? or (N (W) acetyl (W) L (W) cysteine) or "N-acetyl-L-cysteine" or  
(N (W) acetyl (W) cysteine) or "N-acetylcysteine" or siccoral? or siran? or  
solmucol?

L29 26500 MUCOSOLVIN? OR (N (W) ACETYL (W) L (W) CYSTEINE) OR "N-ACETYL-L-  
CYSTEINE" OR (N (W) ACETYL (W) CYSTEINE) OR "N-ACETYLCYSTEINE"  
OR SICCORAL? OR SIRAN? OR SOLMUCOL?

=> d cost

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
CONNECT CHARGES	59.97	72.15
NETWORK CHARGES	1.20	3.24
SEARCH CHARGES	219.24	326.47
DISPLAY CHARGES	0.00	49.45
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FULL ESTIMATED COST	280.41	451.31

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-12.41

IN FILE 'MEDLINE, BIOSIS, CAPLUS, EMBASE, WPIDS' AT 10:17:55 ON 23 MAR 2005

=> d his

(FILE 'HOME' ENTERED AT 09:45:47 ON 23 MAR 2005)

FILE 'CAPLUS' ENTERED AT 09:45:52 ON 23 MAR 2005

L1 9392 S SYNERGY  
L2 152 S SYNERGY AND (ANTIOXIDANT? OR LIPOIC ACID? OR "ACETYL-L-CARNIT  
L3 2 S L2 AND (COGNITIVE OR COGNITION OR AUDITORY OR HEARING)  
E SEIDMAN M/AU  
L4 141 S E3-E12  
L5 11 S L4 AND (MITOCHONDRI?)  
L6 4 S L4 AND (ANTIOXIDANT?)  
L7 1 S L6 NOT L5  
L8 1 S L4 AND (RESVERATROL? OR LIPOIC ACID? OR "ACETYL-L-CARNITINE"

FILE 'STNGUIDE' ENTERED AT 09:56:12 ON 23 MAR 2005

FILE 'CAPLUS' ENTERED AT 09:57:26 ON 23 MAR 2005

FILE 'REGISTRY' ENTERED AT 09:57:38 ON 23 MAR 2005

E ALPHA LIPOIC ACID/CN  
E THIOCTIC ACID/CN  
L9 1 S E3  
E ACETYL-L-CARNITINE/CN  
L10 1 S E3  
E RESVERATROL/CN  
L11 1 S E3  
E LECITHIN/CN  
E N-ACETYL CYSTEINE/CN  
E ACETYL CYSTEINE/CN  
E ACETYLCYSTEINE/CN  
L12 1 S E3

FILE 'CAPLUS' ENTERED AT 09:59:30 ON 23 MAR 2005

L13 1450 S L9  
 L14 826 S L10  
 L15 1859 S L11  
 L16 5712 S L12  
 L17 78314 S LECITHIN? OR PHOSPHATIDYL CHOLINE? OR PHOSPHATIDYLCHOLINE? OR  
 L18 3 S (L9 OR L10) AND L11 AND L17 AND L12  
 L19 0 S L9 AND L11 AND L17 AND L12  
 L20 3 S L10 AND L11 AND L17 AND L12  
 L21 0 S L20 NOT L18  
 L22 2 S L9 AND L11

FILE 'MEDLINE, BIOSIS, CAPLUS, EMBASE, WPIDS' ENTERED AT 10:05:12 ON 23  
 MAR 2005

L23 10890 S (ALPHA LIPOIC ACID?) OR (LIPOIC ACID?) OR THIOCTIC ACID? OR "  
 L24 58333 S RESVERATROL? OR "KO-JO-KON" OR "3,4',5-STILBENETRIOL" OR "3,5  
 L25 198733 S (PHOSPHATIDYL (W) CHOLINE?) OR (PHOSPHATIDYLCHOLINE?) OR (CHO  
 L26 5261 S ACETYLCARNITINE? OR (ACETYL (W) CARNITINE?) OR MEDOSAN? OR "A  
 L27 32758 S ACETYLCYSTEIN? OR MERCAPTURIC ACID? OR ACEMUC? OR ACETABS? OR  
 L28 1478 S EURESPIRAN? OR EXOMUC? OR FABROL? OR FLUIMICIL? OR FLUPROWIT?  
 L29 26500 S MUCOSOLVIN? OR (N (W) ACETYL (W) L (W) CYSTEINE) OR "N-ACETYL

=> s 127 or 128 or 129

L30 40161 L27 OR L28 OR L29

=> s 123 and 124 and 125 and 126 and 130

L31 5 L23 AND L24 AND L25 AND L26 AND L30

=> dup rem 131

PROCESSING COMPLETED FOR L31

L32 4 DUP REM L31 (1 DUPLICATE REMOVED)

ANSWERS '1-3' FROM FILE CAPLUS

ANSWER '4' FROM FILE WPIDS

=> d 132 1-4 ibib ed abs

L32 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 1

ACCESSION NUMBER: 2001:741547 CAPLUS

DOCUMENT NUMBER: 135:293963

TITLE: Oral pharmaceuticals containing coenzyme Q with high  
 dissolution qualities

INVENTOR(S): Chopra, Raj K.

PATENT ASSIGNEE(S): USA

SOURCE: U.S., 11 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6300377	B1	20011009	US 2001-790783	20010222
CA 2432020	AA	20020906	CA 2002-2432020	20020220
WO 2002067864	A2	20020906	WO 2002-US5970	20020220
WO 2002067864	A3	20021219		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,  
 CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,  
 GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,  
 LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,  
 PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,  
 UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,  
 CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,  
 BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

AB A dietary supplement for promoting healthy hormonal balance in adult human subjects, and especially in elderly subjects, comprises a secretagogue for stimulating the release of human growth hormone (hGH) by the pituitary, and the conversion by hGH to insulin-like growth factor 1 (IGF-1), in combination with 7-keto-dehydroepiandrosterone (7-keto DHEA). The dietary supplement also includes other interacting ingredients for delivering antioxidants for retarding damage at the cellular level caused by the presence of free radicals, and natural herbs for promoting physiol. health. For example, an essentially dry powder constituting a dietary supplement of this invention, to be dissolved in water to provide a daily serving, contained 7-keto-DHEA 25 mg, Symbiotropin 1000 mg, **lecithin** 200 mg, maltodextrin 7.227 mg, citric acid 640 mg, dipotassium phosphate 25 mg, potassium citrate 25 mg, probiotic blend 100 mg, fruco-oligosaccharides 400 mg, S-adenosyl-L-methionine 5 mg, **acetyl-L-carnitine** 100 mg, omega-3 fatty acids (Dry n-3) 125 mg, trimethylglycine 100 mg, coenzyme Q10 7.5 mg, **resveratrol** (Protokin) 10 mg, **.alpha.-lipoic**

acid 50 mg, L-glutathione 30 mg, N-acetylcysteine 200 mg, and flavoring agents 300 mg.  
REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L32 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN  
ACCESSION NUMBER: 2001:545461 CAPLUS  
DOCUMENT NUMBER: 135:127168  
TITLE: Reduced form of coenzyme Q in highly bioavailable stable dosage forms  
INVENTOR(S): Chopra, Raj K.  
PATENT ASSIGNEE(S): USA  
SOURCE: PCT Int. Appl., 50 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001052822	A1	20010726	WO 2001-US1997	20010118
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6740338	B1	20040525	US 2000-488332	20000120
CA 2397447	AA	20010726	CA 2001-2397447	20010118
EP 1251834	A1	20021030	EP 2001-942547	20010118
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
PRIORITY APPLN. INFO.:			US 2000-488332	A 20000120
			US 2000-637559	A 20000811
			WO 2001-US1997	W 20010118

OTHER SOURCE(S): MARPAT 135:127168

ED Entered STN: 27 Jul 2001

AB The present invention relates to a reduced form of coenzyme Q also known as ubiquinol in a pharmaceutical or cosmetic dosage form, preferably an oral dosage form such as a gelatin capsule. Compns. according to the present invention show high bioavailability of the reduced form of Coenzyme Q. The present invention relates to storage stable compns. comprising effective amts. of ubiquinol in combination with an amount of a reducing agent effective to maintain ubiquinol in its reduced state when formulated as in, e.g., capsules, tablets and other orally administrable form. A capsule formulation contained vitamin E acetate 6, hydroxylated **lecithin 4, phosphatidylcholine 32**, medium-chain triglyceride 20, Gelucire 30, coenzyme Q10 4, and ascorbyl palmitate 4%.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L32 ANSWER 4 OF 4 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
ACCESSION NUMBER: 2004-224109 [21] WPIDS  
DOC. NO. CPI: C2004-088343  
TITLE: Nutritional supplement composition useful for anti-aging comprises nutritional supplements e.g. vitamin, mineral, blood sugar/insulin support, botanical antioxidant, methylating factor, DNA repair agent, fat metabolizer.  
DERWENT CLASS: A11 A25 A96 B04 D13  
INVENTOR(S): GIAMPAPA, V C

PATENT ASSIGNEE(S): (GIAM-I) GIAMPAPA V C  
 COUNTRY COUNT: 108  
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
US 2004001817	A1	20040101	(200421)*		25
WO 2004100896	A2	20041125	(200478)	EN	
RW: AT BE BG BW CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE					
LS LU MC MW MZ NA NL OA PL PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW					
W: AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE					
DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG					
KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NA NI NO NZ					
OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG					
US UZ VC VN YU ZA ZM ZW					

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 2004001817	A1 Provisional	US 2002-378160P	20020514
		US 2003-438247	20030513
WO 2004100896	A2	WO 2004-US14791	20040511

PRIORITY APPLN. INFO: US 2002-378160P 20020514; US  
 2003-438247 20030513

ED 20040326

AN 2004-224109 [21] WPIDS

AB US2004001817 A UPAB: 20040326

NOVELTY - An anti-aging nutritional supplement composition (C1) comprises vitamin (a); mineral (b); a blood sugar/insulin support (c); botanical antioxidant (d); a methylating factor (e); a DNA repair agent (f); a fat metabolizer (g); an absorption enhancer (h); a brain function support (i); a cellular energizer (j); a nucleotide precursor (k); amino acid (l); a fatty acid complex (m); a probiotic complex (n); and digestive enzyme (o).

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for an anti-aging nutritional supplement system (S1) comprising a first nutritional supplement composition (F1) to be administered in the morning containing (a) including vitamin A (3600 IU), vitamin C (200 mg), vitamin D (80 IU), vitamin E (100 IU), vitamin K (150 mcg), thiamin (10 mg), riboflavin (8 mg), niacin (140 mg), vitamin B6 (24 mg), folate (100 mcg), vitamin B12 (160 mcg), biotin (100 mcg) or pantothenic acid (24 mg); (b) including calcium (600 mg), iodine (60 mcg), zinc (4 mg), selenium (60 mcg), copper (0.4 mg), manganese (0.4 mg), chromium (100 mcg) or molybdenum (20 mcg); inflammatory process support (p) (100 mg); (c) including a blend of vanadium (50 mcg) or a mixture of fenugreek seed, **alpha-lipoic acid** and coenzyme Q-10 (80 mg); (d) including green tea leaf extract (100 mg), anthocyanins (10 mg), ginkgo biloba leaf extract (100 mg) or guarana seed extract (80 mg); (e) including betaine HCl (8 mg) or sulfur (2.5 mg); (f) (175 mg); (g) (50 mg); (h) (50 mg); (i) (50 mg); whole food (q) (300 mg); (j) including Cardyiceps sinensis fungus extract (1% cordycepic acid) (25 mg) and royal jelly 3 multiply (5% 10-HAD) (20 mg); (k) (50 mg); (l) (275 mg); (m) (400 mg) and (o) (1760 unit); a second nutritional supplement composition (F2) to be administered at midday, containing (a) including vitamin A (2400 IU), vitamin C (160 mg), vitamin D (40 IU), vitamin E (65 IU), vitamin K (150 mcg), thiamin (12 mg), riboflavin (1 mg), niacin (140 mg), vitamin B6 (4 mg), folate (65 mcg), vitamin B12 (200 mcg), biotin (65 mcg) or pantothenic acid (32 mg); (b) including calcium (200 mg), iodine (15 mcg), zinc (2.5 mg), selenium (40 mcg), copper (0.2 mg), manganese (0.2 mg), chromium (40 mcg) or molybdenum (12 mcg); (p) (100 mg); (c) including a blend of vanadium (32 mcg) or a mixture of fenugreek seed, **alpha-lipoic acid** and coenzyme Q-10 (55 mg); (d) including

ginkgo biloba leaf extract (100 mg) or guarana seed extract (16 mg); (e) including betaine HCl (6.4 mg) or sulfur (1.5 mg); (g) (400 mg); (h) (50 mg); (i) (50 mg); (q) (150 mg); (j) Cardyiceps sinensis fungus extract (1% cordycepic acid) (20 mg) or royal jelly 3 multiply (5% 10-HAD) (12 mg); (k) (50 mg); (l) (225 mg); (m) (400 mg); and (o) (1408 unit); and third nutritional supplement composition (F3) to be administered in the night containing (a) including vitamin A (2800 IU), vitamin C (400 mg), vitamin D (60 IU), vitamin E (80 IU), vitamin K (150 mcg), thiamin (5 mg), riboflavin (10 mg), niacin (140 mg), vitamin B6 (15 mg), folate (160 mcg), vitamin B12 (240 mcg), biotin (80 mcg) or pantothenic acid (40 mg); (b) including calcium (215 mg), iodine (24 mcg), magnesium (265 mg), zinc (3 mg), selenium (48 mcg), copper (0.2 mg), manganese (0.2 mg), chromium (80 mcg), molybdenum (16 mcg); (p) (100 mg); (c) including a blend of vanadium (40 mcg) or a mixture of fenugreek seed, **alpha-lipoic acid** and coenzyme Q-10 (67 mg); (d) (147 mg); (e) including betaine HCl (5 mg), sulfur (2 mg); (f) (175 mg); (g) (30 mg); (h) (40 mg); (i) (161 mg); (q) (140 mg); (j) Cardyiceps sinensis fungus extract (1% cordycepic acid) (16.5 mg) and royal jelly 3 multiply (5% 10-HAD) (18 mg); (k) (50 mg); (l) (1148 mg); (m) (400 mg), (n) (100 million CFU) and (o) (1169 units).

ACTIVITY - Nootropic.

MECHANISM OF ACTION - NF-kB inhibitor.

USE - For anti-aging treatment (claimed).

ADVANTAGE - (C1) supplies nutritional supplements necessary for proper glycation, DNA methylation, anti-oxidation and control of inflammatory processes; decreases DNA damage, increases DNA repair; improves immune function of human body; maintains proper cell metabolism and body function; assists in cellular regeneration and immune system repair; increases the digestive and metabolic capabilities of the body; maximizes metabolization, proper hormonal formation, release and utilization of supplements of vitamin, mineral and nutrient supplement system; provides appropriate acidity to both the extracellular and intracellular matrices. The improved ratio of DNA repair over DNA damage results in less cell mutations and more accurate cell copies during cell replication, thus preserving adult stem pods. (C1) applies synergistic effect obtained from the combination of C-MED-100 (RTM; Cat's claw) and other nutritional supplements.

Dwg.0/8

=> d his

(FILE 'HOME' ENTERED AT 09:45:47 ON 23 MAR 2005)

FILE 'CAPLUS' ENTERED AT 09:45:52 ON 23 MAR 2005

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L1      9392 S SYNERGY
L2      152 S SYNERGY AND (ANTIOXIDANT? OR LIPOIC ACID? OR "ACETYL-L-CARNIT
L3      2 S L2 AND (COGNITIVE OR COGNITION OR AUDITORY OR HEARING)
          E SEIDMAN M/AU
L4      141 S E3-E12
L5      11 S L4 AND (MITOCHONDRI?)
L6      4 S L4 AND (ANTIOXIDANT?)
L7      1 S L6 NOT L5
L8      1 S L4 AND (RESVERATROL? OR LIPOIC ACID? OR "ACETYL-L-CARNITINE"
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FILE 'STNGUIDE' ENTERED AT 09:56:12 ON 23 MAR 2005

FILE 'CAPLUS' ENTERED AT 09:57:26 ON 23 MAR 2005

FILE 'REGISTRY' ENTERED AT 09:57:38 ON 23 MAR 2005

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          E ALPHA LIPOIC ACID/CN
          E THIOCTIC ACID/CN
L9      1 S E3
          E ACETYL-L-CARNITINE/CN
```

L10 1 S E3  
E RESVERATROL/CN  
L11 1 S E3  
E LECITHIN/CN  
E N-ACETYL CYSTEINE/CN  
E ACETYL CYSTEINE/CN  
E ACETYLCYSTEINE/CN  
L12 1 S E3

FILE 'CAPLUS' ENTERED AT 09:59:30 ON 23 MAR 2005

L13 1450 S L9  
L14 826 S L10  
L15 1859 S L11  
L16 5712 S L12  
L17 78314 S LECITHIN? OR PHOSPHATIDYL CHOLINE? OR PHOSPHATIDYLCHOLINE? OR  
L18 3 S (L9 OR L10) AND L11 AND L17 AND L12  
L19 0 S L9 AND L11 AND L17 AND L12  
L20 3 S L10 AND L11 AND L17 AND L12  
L21 0 S L20 NOT L18  
L22 2 S L9 AND L11

FILE 'MEDLINE, BIOSIS, CAPLUS, EMBASE, WPIDS' ENTERED AT 10:05:12 ON 23 MAR 2005

L23 10890 S (ALPHA LIPOIC ACID?) OR (LIPOIC ACID?) OR THIOCTIC ACID? OR "  
L24 58333 S RESVERATROL? OR "KO-JO-KON" OR "3,4',5-STILBENETRIOL" OR "3,5  
L25 198733 S (PHOSPHATIDYL (W) CHOLINE?) OR (PHOSPHATIDYLCHOLINE?) OR (CHO  
L26 5261 S ACETYLCARNITINE? OR (ACETYL (W) CARNITINE?) OR MEDOSAN? OR "A  
L27 32758 S ACETYLCYSTEIN? OR MERCAPTURIC ACID? OR ACEMUC? OR ACETABS? OR  
L28 1478 S EURESPIRAN? OR EXOMUC? OR FABROL? OR FLUIMICIL? OR FLUPROWIT?  
L29 26500 S MUCOSOLVIN? OR (N (W) ACETYL (W) L (W) CYSTEINE) OR "N-ACETYL  
L30 40161 S L27 OR L28 OR L29  
L31 5 S L23 AND L24 AND L25 AND L26 AND L30  
L32 4 DUP REM L31 (1 DUPLICATE REMOVED)

=> s 123 and 124 and 125 and 130  
L33 11 L23 AND L24 AND L25 AND L30

=> dup rem 133  
PROCESSING COMPLETED FOR L33  
L34 8 DUP REM L33 (3 DUPLICATES REMOVED)  
ANSWERS '1-5' FROM FILE CAPLUS  
ANSWERS '6-7' FROM FILE EMBASE  
ANSWER '8' FROM FILE WPIDS

=> d 134 1-8 ibib ed abs

L34 ANSWER 1 OF 8 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 1  
ACCESSION NUMBER: 2004:964970 CAPLUS  
DOCUMENT NUMBER: 141:407236  
TITLE: Treatment of plants and plant propagation materials  
with an antioxidant and pesticide to improve plant  
health and/or yield  
INVENTOR(S): Asrar, Jawed; Ding, Yiwei; Bourque, June E.; Sanders,  
Ernest F.  
PATENT ASSIGNEE(S): Monsanto Technology, LLC, USA  
SOURCE: PCT Int. Appl., 79 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 2004095926 A2 20041111 WO 2004-US10720 20040407

WO 2004095926 A3 20050127

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW  
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 2004259732 A1 20041223 US 2004-832578 20040427

PRIORITY APPLN. INFO.: US 2003-466104P P 20030428

ED Entered STN: 12 Nov 2004

AB Methods and compns. are described for the treatment of plants and plant propagation materials with an antioxidant alone or in combination with a pesticide for improved germination rates. Plants that grow from treated plant propagation materials, or plants that are treated directly, show improved stand d. or vigor, and/or improved yields.

L34 ANSWER 2 OF 8 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 2

ACCESSION NUMBER: 2004:633154 CAPLUS

DOCUMENT NUMBER: 141:167729

TITLE: Gastrointestinal glutathione peroxidase as therapeutic target for treatment of HCV infection, methods of treating HCV infection, and compounds useful therefor  
INVENTOR(S): Herget, Thomas; Cotten, Matthew; Obert, Sabine; Klebl, Bert

PATENT ASSIGNEE(S): Germany

SOURCE: U.S. Pat. Appl. Publ., 24 pp., Cont.-in-part of U.S. Pat. Appl. 2003 180,719.  
CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004152073	A1	20040805	US 2003-723719	20031126
WO 2002084294	A2	20021024	WO 2002-EP4167	20020415
WO 2002084294	A3	20031030		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW  
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

DE 10255861 A1 20040617 DE 2002-10255861 20021129

US 2003180719 A1 20030925 US 2003-342054 20030114

PRIORITY APPLN. INFO.: US 2001-283345P P 20010413

WO 2002-EP4167 A2 20020415

DE 2002-10255861 A 20021129

US 2002-430367P P 20021203

US 2003-342054 A2 20030114

ED Entered STN: 06 Aug 2004

AB The present invention relates to the human cellular protein glutathione peroxidase-gastrointestinal as a target for medical intervention against



Hepatitis C virus (HCV) infections. Furthermore, the present invention relates to a method for the detection of compds. useful for prophylaxis and/or treatment of hepatitis C virus infections and a method for detecting hepatitis C virus infections in an individual or in cells. Also compns., compds., nucleic acid mols. (such as aptamers), mono- or polyclonal antibodies are disclosed which are effective for the treatment of HCV infections, and methods for prophylaxis and/or treatment of hepatitis C virus infections or for the regulation of hepatitis C virus production are disclosed. The inventors designed a randomized, single-blinded clin. study to test the safety, tolerability, and efficacy of all-trans retinoic acid alone or in combination with pegylated  $\alpha$  interferon in patients with chronic hepatitis C. The therapy regimens include: Vesanoid (orally administered all-trans retinoic acid compound, Hoffman-La Roche); Pegasys (slow-release pegylated interferon  $\alpha$ 2a, Hoffman-La Roche); and selen 30 ALLACT (supplement containing selenium and ALLACT composed of garlic powder and Lactobacillus bulgaricus).

L34 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 3

ACCESSION NUMBER: 2001:741547 CAPLUS  
DOCUMENT NUMBER: 135:293963  
TITLE: Oral pharmaceuticals containing coenzyme Q with high dissolution qualities  
INVENTOR(S): Chopra, Raj K.  
PATENT ASSIGNEE(S): USA  
SOURCE: U.S., 11 pp.  
CODEN: USXXAM  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6300377	B1	20011009	US 2001-790783	20010222
CA 2432020	AA	20020906	CA 2002-2432020	20020220
WO 2002067864	A2	20020906	WO 2002-US5970	20020220
WO 2002067864	A3	20021219		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1505958	A2	20050216	EP 2002-721189	20020220
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
PRIORITY APPLN. INFO.:			US 2001-790783	A 20010222
			WO 2002-US5970	W 20020220

ED Entered STN: 11 Oct 2001

AB The present invention relates to a composition in liquid dosage form of coenzyme

Q or ubiquinone which can be formulated into cosmetic, dietary supplement or pharmaceutical dosage form for administration to patients. The dosage form comprises an effective amount of coenzyme Q or ubiquinone ranging from about 0.05 to about 15, more preferably about 1 to about 10.0 by weight of the composition in combination with a polysorbate surfactant such as a Tween®, surfactant, a vegetable oil or triglyceride, in further combination with a glyceryl ester in amts. effective to produce a liquid dosage form. Optional additives include a phospholipid such as hydroxylated lecithin, among others such as tocopherols or tocopherol esters effective to solubilize the ubiquinone in combination as

well as other bioactive agents. Compns. according to the present invention avoid the inclusion of a polyhydric alc. solvent in solubilizing amts. A liquid dosage form contained coenzyme Q10 7, Tween 80 (Polysorbate 80) 38, Tributyrin (Glyceryl tributyrate) 19, medium chain triglycerides 19, and vitamin E alc. (or acetate) 17%. The formulation resulted in 100% dissoln.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L34 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:271056 CAPLUS

DOCUMENT NUMBER: 136:299719

TITLE: Dietary supplement for promoting healthy hormonal balance

INVENTOR(S): Hastings, Carl W.; Barnes, David J.; Daley, Christine A.

PATENT ASSIGNEE(S): Reliv' International, Inc., USA

SOURCE: U.S., 5 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6368617	B1	20020409	US 2001-858047	20010515
			US 2001-858047	20010515

PRIORITY APPLN. INFO.:

ED Entered STN: 11 Apr 2002

AB A dietary supplement for promoting healthy hormonal balance in adult human subjects, and especially in elderly subjects, comprises a secretagogue for stimulating the release of human growth hormone (hGH) by the pituitary, and the conversion by hGH to insulin-like growth factor 1 (IGF-1), in combination with 7-keto-dehydroepiandrosterone (7-keto DHEA). The dietary supplement also includes other interacting ingredients for delivering antioxidants for retarding damage at the cellular level caused by the presence of free radicals, and natural herbs for promoting physiol. health. For example, an essentially dry powder constituting a dietary supplement of this invention, to be dissolved in water to provide a daily serving, contained 7-keto-DHEA 25 mg, Symbiotropin 1000 mg, **lecithin** 200 mg, maltodextrin 7.227 mg, citric acid 640 mg, dipotassium phosphate 25 mg, potassium citrate 25 mg, probiotic blend 100 mg, fruco-oligosaccharides 400 mg, S-adenosyl-L-methionine 5 mg, acetyl-L-carnitine 100 mg, omega-3 fatty acids (Dry n-3) 125 mg, trimethylglycine 100 mg, coenzyme Q10 7.5 mg, **resveratrol** (Protykin) 10 mg, **.alpha.-lipoic acid** 50 mg, L-glutathione 30 mg, **N-acetylcysteine** 200 mg, and flavoring agents 300 mg.

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L34 ANSWER 5 OF 8 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2001:545461 CAPLUS

DOCUMENT NUMBER: 135:127168

TITLE: Reduced form of coenzyme Q in highly bioavailable stable dosage forms

INVENTOR(S): Chopra, Raj K.

PATENT ASSIGNEE(S): USA

SOURCE: PCT Int. Appl., 50 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001052822	A1	20010726	WO 2001-US1997	20010118
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6740338	B1	20040525	US 2000-488332	20000120
CA 2397447	AA	20010726	CA 2001-2397447	20010118
EP 1251834	A1	20021030	EP 2001-942547	20010118
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
PRIORITY APPLN. INFO.:			US 2000-488332	A 20000120
			US 2000-637559	A 20000811
			WO 2001-US1997	W 20010118

OTHER SOURCE(S): MARPAT 135:127168

ED Entered STN: 27 Jul 2001

AB The present invention relates to a reduced form of coenzyme Q also known as ubiquinol in a pharmaceutical or cosmetic dosage form, preferably an oral dosage form such as a gelatin capsule. Compns. according to the present invention show high bioavailability of the reduced form of Coenzyme Q. The present invention relates to storage stable compns. comprising effective amts. of ubiquinol in combination with an amount of a reducing agent effective to maintain ubiquinol in its reduced state when formulated as in, e.g., capsules, tablets and other orally administrable form. A capsule formulation contained vitamin E acetate 6, hydroxylated **lecithin 4, phosphatidylcholine 32**, medium-chain triglyceride 20, Gelucire 30, coenzyme Q10 4, and ascorbyl palmitate 4%.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L34 ANSWER 6 OF 8 EMBASE COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED.  
on STN

ACCESSION NUMBER: 2004432899 EMBASE

TITLE: Intratympanic treatment of hearing loss with novel and traditional agents.

AUTHOR: Seidman M.D.; Vivek P.

CORPORATE SOURCE: Dr. M.D. Seidman, Dept. Otolaryngol.-Hd. Neck Surg., Henry Ford Medical Center, 2799 West Grand Boulevard, 48202, Detroit, MI, United States. mseidmal@hfhs.org

SOURCE: Otolaryngologic Clinics of North America, (2004) 37/5 (973-990).

Refs: 164

ISSN: 0030-6665 CODEN: OCNABW

PUBLISHER IDENT.: S 0030-6665(04)00083-0

COUNTRY: United States

DOCUMENT TYPE: Journal; General Review

FILE SEGMENT: 011 Otorhinolaryngology

037 Drug Literature Index

038 Adverse Reactions Titles

LANGUAGE: English

SUMMARY LANGUAGE: English

AB As knowledge of the cellular and molecular pathophysiology behind otopathologies expands, the possibility exists of preventing sensorineural hearing loss and perhaps reversing the loss. Cellular and molecular mechanisms seem to be similar in hearing loss secondary to aging, drug ototoxicity, noise, or other mechanisms. A final common pathway may hinge upon apoptosis. It is likely that anti-apoptotic factors will increasingly

be realized as an important intervention strategy for sensorineural hearing loss. Furthermore, it is also possible that mounting a staged attack at the various regions in the pathway leading to cellular damage using a combination of several protective substances such as steroids, antioxidants, neurotrophic factors, anti-apoptotic compounds, and mitochondrial enhancers may prevent hearing loss and even reverse it in some situations. This article has presented some of the molecular and cellular mechanisms for hearing loss and potential ways of treating them. In theory, the delivery of these medications to the inner ear transtympanically would decrease systemic side effects and be more target specific. Because most of the studies conducted to date have been animal studies, randomized, double-blind, placebo-controlled clinical trials would be necessary before the use of these therapies becomes common practice.

L34 ANSWER 7 OF 8 EMBASE COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED.  
on STN  
ACCESSION NUMBER: 2005027271 EMBASE  
TITLE: Identification of diseases that may be targets for  
complementary and alternative medicine (CAM).  
AUTHOR: Vojdani A.; Cooper E.L.  
CORPORATE SOURCE: Dr. A. Vojdani, 8693 Wilshire Blvd., Beverly Hills, CA  
90211, United States  
SOURCE: Advances in Experimental Medicine and Biology, (2004) 546/-  
(75-104).  
Refs: 113  
ISSN: 0065-2598 CODEN: AEMBAP  
COUNTRY: United States  
DOCUMENT TYPE: Journal; Conference Article  
FILE SEGMENT: 006 Internal Medicine  
008 Neurology and Neurosurgery  
048 Gastroenterology  
LANGUAGE: English

L34 ANSWER 8 OF 8 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
ACCESSION NUMBER: 2004-224109 [21] WPIDS  
DOC. NO. CPI: C2004-088343  
TITLE: Nutritional supplement composition useful for anti-aging  
comprises nutritional supplements e.g. vitamin, mineral,  
blood sugar/insulin support, botanical antioxidant,  
methylating factor, DNA repair agent, fat metabolizer.  
DERWENT CLASS: A11 A25 A96 B04 D13  
INVENTOR(S): GIAMPAPA, V C  
PATENT ASSIGNEE(S): (GIAM-I) GIAMPAPA V C  
COUNTRY COUNT: 108  
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
US 2004001817	A1	20040101	(200421)*	25	
WO 2004100896	A2	20041125	(200478)	EN	
RW:	AT BE BG BW CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE				
LS LU MC MW MZ NA NL OA PL PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW					
W:	AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE				
DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG					
KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NA NI NO NZ					
OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG					
US UZ VC VN YU ZA ZM ZW					

# APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 2004001817	A1 Provisional	US 2002-378160P	20020514

WO 2004100896 A2

US 2003-438247  
WO 2004-US14791

20030513  
20040511

PRIORITY APPLN. INFO: US 2002-378160P 20020514; US  
2003-438247 20030513

ED 20040326

AN 2004-224109 [21] WPIDS

AB US2004001817 A UPAB: 20040326

NOVELTY - An anti-aging nutritional supplement composition (C1) comprises vitamin (a); mineral (b); a blood sugar/insulin support (c); botanical antioxidant (d); a methylating factor (e); a DNA repair agent (f); a fat metabolizer (g); an absorption enhancer (h); a brain function support (i); a cellular energizer (j); a nucleotide precursor (k); amino acid (l); a fatty acid complex (m); a probiotic complex (n); and digestive enzyme (o).

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for an anti-aging nutritional supplement system (S1) comprising a first nutritional supplement composition (F1) to be administered in the morning containing (a) including vitamin A (3600 IU), vitamin C (200 mg), vitamin D (80 IU), vitamin E (100 IU), vitamin K (150 mcg), thiamin (10 mg), riboflavin (8 mg), niacin (140 mg), vitamin B6 (24 mg), folate (100 mcg), vitamin B12 (160 mcg), biotin (100 mcg) or pantothenic acid (24 mg); (b) including calcium (600 mg), iodine (60 mcg), zinc (4 mg), selenium (60 mcg), copper (0.4 mg), manganese (0.4 mg), chromium (100 mcg) or molybdenum (20 mcg); inflammatory process support (p) (100 mg); (c) including a blend of vanadium (50 mcg) or a mixture of fenugreek seed, **alpha-lipoic acid** and coenzyme Q-10 (80 mg); (d) including green tea leaf extract (100 mg), anthocyanins (10 mg), ginkgo biloba leaf extract (100 mg) or guarana seed extract (80 mg); (e) including betaine HCl (8 mg) or sulfur (2.5 mg); (f) (175 mg); (g) (50 mg); (h) (50 mg); (i) (50 mg); whole food (q) (300 mg); (j) including Cardyiceps sinensis fungus extract (1% cordycepic acid) (25 mg) and royal jelly 3 multiply (5% 10-HAD) (20 mg); (k) (50 mg); (l) (275 mg); (m) (400 mg) and (o) (1760 unit); a second nutritional supplement composition (F2) to be administered at midday, containing (a) including vitamin A (2400 IU), vitamin C (160 mg), vitamin D (40 IU), vitamin E (65 IU), vitamin K (150 mcg), thiamin (12 mg), riboflavin (1 mg), niacin (140 mg), vitamin B6 (4 mg), folate (65 mcg), vitamin B12 (200 mcg), biotin (65 mcg) or pantothenic acid (32 mg); (b) including calcium (200 mg), iodine (15 mcg), zinc (2.5 mg), selenium (40 mcg), copper (0.2 mg), manganese (0.2 mg), chromium (40 mcg) or molybdenum (12 mcg); (p) (100 mg); (c) including a blend of vanadium (32 mcg) or a mixture of fenugreek seed, **alpha-lipoic acid** and coenzyme Q-10 (55 mg); (d) including ginkgo biloba leaf extract (100 mg) or guarana seed extract (16 mg); (e) including betaine HCl (6.4 mg) or sulfur (1.5 mg); (g) (400 mg); (h) (50 mg); (i) (50 mg); (q) (150 mg); (j) Cardyiceps sinensis fungus extract (1% cordycepic acid) (20 mg) or royal jelly 3 multiply (5% 10-HAD) (12 mg); (k) (50 mg); (l) (225 mg); (m) (400 mg); and (o) (1408 unit); and third nutritional supplement composition (F3) to be administered in the night containing (a) including vitamin A (2800 IU), vitamin C (400 mg), vitamin D (60 IU), vitamin E (80 IU), vitamin K (150 mcg), thiamin (5 mg), riboflavin (10 mg), niacin (140 mg), vitamin B6 (15 mg), folate (160 mcg), vitamin B12 (240 mcg), biotin (80 mcg) or pantothenic acid (40 mg); (b) including calcium (215 mg), iodine (24 mcg), magnesium (265 mg), zinc (3 mg), selenium (48 mcg), copper (0.2 mg), manganese (0.2 mg), chromium (80 mcg), molybdenum (16 mcg); (p) (100 mg); (c) including a blend of vanadium (40 mcg) or a mixture of fenugreek seed, **alpha-lipoic acid** and coenzyme Q-10 (67 mg); (d) (147 mg); (e) including betaine HCl (5 mg), sulfur (2 mg); (f) (175 mg); (g) (30 mg); (h) (40 mg); (i) (161 mg); (q) (140 mg); (j) Cardyiceps sinensis fungus extract (1% cordycepic acid) (16.5 mg) and royal jelly 3 multiply (5% 10-HAD) (18 mg); (k) (50 mg); (l) (1148 mg); (m) (400 mg), (n) (100 million CFU) and (o) (1169 units).

ACTIVITY - Nootropic.

MECHANISM OF ACTION - NF-kB inhibitor.

USE - For anti-aging treatment (claimed).

ADVANTAGE - (C1) supplies nutritional supplements necessary for proper glycation, DNA methylation, anti-oxidation and control of inflammatory processes; decreases DNA damage, increases DNA repair; improves immune function of human body; maintains proper cell metabolism and body function; assists in cellular regeneration and immune system repair; increases the digestive and metabolic capabilities of the body; maximizes metabolization, proper hormonal formation, release and utilization of supplements of vitamin, mineral and nutrient supplement system; provides appropriate acidity to both the extracellular and intracellular matrices. The improved ratio of DNA repair over DNA damage results in less cell mutations and more accurate cell copies during cell replication, thus preserving adult stem pods. (C1) applies synergistic effect obtained from the combination of C-MED-100 (RTM; Cat's claw) and other nutritional supplements.

Dwg.0/8

=> d his

(FILE 'HOME' ENTERED AT 09:45:47 ON 23 MAR 2005)

FILE 'CAPLUS' ENTERED AT 09:45:52 ON 23 MAR 2005

L1 9392 S SYNERGY  
L2 152 S SYNERGY AND (ANTIOXIDANT? OR LIPOIC ACID? OR "ACETYL-L-CARNITINE"  
L3 2 S L2 AND (COGNITIVE OR COGNITION OR AUDITORY OR HEARING)  
E SEIDMAN M/AU  
L4 141 S E3-E12  
L5 11 S L4 AND (MITOCHONDRI?)  
L6 4 S L4 AND (ANTIOXIDANT?)  
L7 1 S L6 NOT L5  
L8 1 S L4 AND (RESVERATROL? OR LIPOIC ACID? OR "ACETYL-L-CARNITINE")

FILE 'STNGUIDE' ENTERED AT 09:56:12 ON 23 MAR 2005

FILE 'CAPLUS' ENTERED AT 09:57:26 ON 23 MAR 2005

FILE 'REGISTRY' ENTERED AT 09:57:38 ON 23 MAR 2005

E ALPHA LIPOIC ACID/CN  
E THIOCTIC ACID/CN  
L9 1 S E3  
E ACETYL-L-CARNITINE/CN  
L10 1 S E3  
E RESVERATROL/CN  
L11 1 S E3  
E LECITHIN/CN  
E N-ACETYL CYSTEINE/CN  
E ACETYL CYSTEINE/CN  
E ACETYLCYSTEINE/CN  
L12 1 S E3

FILE 'CAPLUS' ENTERED AT 09:59:30 ON 23 MAR 2005

L13 1450 S L9  
L14 826 S L10  
L15 1859 S L11  
L16 5712 S L12  
L17 78314 S LECITHIN? OR PHOSPHATIDYL CHOLINE? OR PHOSPHATIDYLCHOLINE? OR  
L18 3 S (L9 OR L10) AND L11 AND L17 AND L12  
L19 0 S L9 AND L11 AND L17 AND L12  
L20 3 S L10 AND L11 AND L17 AND L12  
L21 0 S L20 NOT L18  
L22 2 S L9 AND L11

FILE 'MEDLINE, BIOSIS, CAPLUS, EMBASE, WPIDS' ENTERED AT 10:05:12 ON 23  
MAR 2005

L23 10890 S (ALPHA LIPOIC ACID?) OR (LIPOIC ACID?) OR THIOCTIC ACID? OR "  
L24 58333 S RESVERATROL? OR "KO-JO-KON" OR "3,4',5-STILBENETRIOL" OR "3,5  
L25 198733 S (PHOSPHATIDYL (W) CHOLINE?) OR (PHOSPHATIDYLCHOLINE?) OR (CHO  
L26 5261 S ACETYLCARNITINE? OR (ACETYL (W) CARNITINE?) OR MEDOSAN? OR "A  
L27 32758 S ACETYLCYSTEIN? OR MERCAPTURIC ACID? OR ACEMUC? OR ACETABS? OR  
L28 1478 S EURESPIRAN? OR EXOMUC? OR FABROL? OR FLUIMICIL? OR FLUPROWIT?  
L29 26500 S MUCOSOLVIN? OR (N (W) ACETYL (W) L (W) CYSTEINE) OR "N-ACETYL  
L30 40161 S L27 OR L28 OR L29  
L31 5 S L23 AND L24 AND L25 AND L26 AND L30  
L32 4 DUP REM L31 (1 DUPLICATE REMOVED)  
L33 11 S L23 AND L24 AND L25 AND L30  
L34 8 DUP REM L33 (3 DUPLICATES REMOVED)

=> s 124 and 125 and 126 and 130  
L35 6 L24 AND L25 AND L26 AND L30

=> dup rem 135  
PROCESSING COMPLETED FOR L35  
L36 4 DUP REM L35 (2 DUPLICATES REMOVED)  
ANSWERS '1-4' FROM FILE CAPLUS

=> d 135 1-4 ibib ed abs

L35 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN  
ACCESSION NUMBER: 2004:3455 CAPLUS  
DOCUMENT NUMBER: 140:65214  
TITLE: Antiaging nutritional supplement  
INVENTOR(S): Giampapa, Vincent C.  
PATENT ASSIGNEE(S): USA  
SOURCE: U.S. Pat. Appl. Publ., 25 pp.  
CODEN: USXXCO  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004001817	A1	20040101	US 2003-438247	20030513
WO 2004100896	A2	20041125	WO 2004-US14791	20040511
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

PRIORITY APPLN. INFO.: US 2002-378160P P 20020514  
US 2003-438247 A 20030513

ED Entered STN: 04 Jan 2004

AB An antiaging nutritional supplement composition includes vitamins, minerals, an inflammatory process support, a blood sugar/insulin support, botanical antioxidants, a methylating factor, a DNA repair agent, a fat metabolizer, an absorption enhancer, a brain function support, whole foods, a cellular energizer, a nucleotide precursor, amino acids, a fatty acid complex, and digestive enzymes. The composition supplies nutritional supplements necessary for proper glycation, DNA methylation, anti-oxidation, and control of inflammatory processes. The composition and the method of use provide an

effective anti-aging treatment by decreasing DNA damage, increasing DNA repair, and improving immune function of human body.

L35 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:271056 CAPLUS  
DOCUMENT NUMBER: 136:299719  
TITLE: Dietary supplement for promoting healthy hormonal balance  
INVENTOR(S): Hastings, Carl W.; Barnes, David J.; Daley, Christine A.  
PATENT ASSIGNEE(S): Reliv' International, Inc., USA  
SOURCE: U.S., 5 pp.  
CODEN: USXXAM  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6368617	B1	20020409	US 2001-858047	20010515
PRIORITY APPLN. INFO.:			US 2001-858047	20010515

ED Entered STN: 11 Apr 2002

AB A dietary supplement for promoting healthy hormonal balance in adult human subjects, and especially in elderly subjects, comprises a secretagogue for stimulating the release of human growth hormone (hGH) by the pituitary, and the conversion by hGH to insulin-like growth factor 1 (IGF-1), in combination with 7-keto-dehydroepiandrosterone (7-keto DHEA). The dietary supplement also includes other interacting ingredients for delivering antioxidants for retarding damage at the cellular level caused by the presence of free radicals, and natural herbs for promoting physiologic health. For example, an essentially dry powder constituting a dietary supplement of this invention, to be dissolved in water to provide a daily serving, contained 7-keto-DHEA 25 mg, Symbiotropin 1000 mg, **lecithin** 200 mg, maltodextrin 7.227 mg, citric acid 640 mg, dipotassium phosphate 25 mg, potassium citrate 25 mg, probiotic blend 100 mg, fructo-oligosaccharides 400 mg, S-adenosyl-L-methionine 5 mg, **acetyl-L-carnitine** 100 mg, omega-3 fatty acids (Dry n-3) 125 mg, trimethylglycine 100 mg, coenzyme Q10 7.5 mg, **resveratrol** (Protokin) 10 mg,  $\alpha$ -lipoic acid 50 mg, L-glutathione 30 mg, **N-acetylcysteine** 200 mg, and flavoring agents 300 mg.

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L35 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2001:741547 CAPLUS  
DOCUMENT NUMBER: 135:293963  
TITLE: Oral pharmaceuticals containing coenzyme Q with high dissolution qualities  
INVENTOR(S): Chopra, Raj K.  
PATENT ASSIGNEE(S): USA  
SOURCE: U.S., 11 pp.  
CODEN: USXXAM  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6300377	B1	20011009	US 2001-790783	20010222
CA 2432020	AA	20020906	CA 2002-2432020	20020220
WO 2002067864	A2	20020906	WO 2002-US5970	20020220



A3 20021219

W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,	TM
	CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,	
	GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,	
	LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,	
	PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,	
	UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ,	
	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,	
RW:	CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,	
	BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG	

EP 1505958                      A2                      20050216                      EP 2002-721189                      20020220  
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

PRIORITY APPLN. INFO.:	US 2001-790783	A	20010222
	WO 2002-US5970	W	20020220

ED Entered STN: 11 Oct 2001

AB The present invention relates to a composition in liquid dosage form of  
coenzyme

Q or ubiquinone which can be formulated into cosmetic, dietary supplement or pharmaceutical dosage form for administration to patients. The dosage form comprises an effective amount of coenzyme Q or ubiquinone ranging from about 0.05 to about 15, more preferably about 1 to about 10.0 by weight of the composition in combination with a polysorbate surfactant such as a Tween®, surfactant, a vegetable oil or triglyceride, in further combination with a glyceryl ester in amts. effective to produce a liquid dosage form. Optional additives include a phospholipid such as hydroxylated **lecithin**, among others such as tocopherols or tocopherol esters effective to solubilize the ubiquinone in combination as well as other bioactive agents. Compns. according to the present invention avoid the inclusion of a polyhydric alc. solvent in solubilizing amts. A liquid dosage form contained coenzyme Q10 7, Tween 80 (Polysorbate 80) 38, Tributyrin (Glyceryl tributyrate) 19, medium chain triglycerides 19, and vitamin E alc. (or acetate) 17%. The formulation resulted in 100% dissoln.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L35 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2001:545461 CAPLUS

DOCUMENT NUMBER: 135:127168

TITLE: Reduced form of coenzyme Q in highly bioavailable stable dosage forms

INVENTOR(S): Chopra, Raj K.

PATENT ASSIGNEE(S) : USA

SOURCE: PCT Int. Appl., 50 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001052822	A1	20010726	WO 2001-US1997	20010118
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
US 6740338	B1	20040525	US 2000-488332	20000120

CA 2397447 AA 20010726 CA 2001-2397447 20010118  
 EP 1251834 A1 20021030 EP 2001-942547 20010118  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR  
 PRIORITY APPLN. INFO.: US 2000-488332 A 20000120  
 US 2000-637559 A 20000811  
 WO 2001-US1997 W 20010118

OTHER SOURCE(S): MARPAT 135:127168

ED Entered STN: 27 Jul 2001

AB The present invention relates to a reduced form of coenzyme Q also known as ubiquinol in a pharmaceutical or cosmetic dosage form, preferably an oral dosage form such as a gelatin capsule. Compsn. according to the present invention show high bioavailability of the reduced form of Coenzyme Q. The present invention relates to storage stable comps. comprising effective amts. of ubiquinol in combination with an amount of a reducing agent effective to maintain ubiquinol in its reduced state when formulated as in, e.g., capsules, tablets and other orally administrable form. A capsule formulation contained vitamin E acetate 6, hydroxylated **lecithin 4, phosphatidylcholine 32**, medium-chain triglyceride 20, Gelucire 30, coenzyme Q10 4, and ascorbyl palmitate 4%.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d his

(FILE 'HOME' ENTERED AT 09:45:47 ON 23 MAR 2005)

FILE 'CAPLUS' ENTERED AT 09:45:52 ON 23 MAR 2005

L1 9392 S SYNERGY  
 L2 152 S SYNERGY AND (ANTIOXIDANT? OR LIPOIC ACID? OR "ACETYL-L-CARNIT  
 L3 2 S L2 AND (COGNITIVE OR COGNITION OR AUDITORY OR HEARING)  
 E SEIDMAN M/AU  
 L4 141 S E3-E12  
 L5 11 S L4 AND (MITOCHONDRI?)  
 L6 4 S L4 AND (ANTIOXIDANT?)  
 L7 1 S L6 NOT L5  
 L8 1 S L4 AND (RESVERATROL? OR LIPOIC ACID? OR "ACETYL-L-CARNITINE"

FILE 'STNGUIDE' ENTERED AT 09:56:12 ON 23 MAR 2005

FILE 'CAPLUS' ENTERED AT 09:57:26 ON 23 MAR 2005

FILE 'REGISTRY' ENTERED AT 09:57:38 ON 23 MAR 2005

E ALPHA LIPOIC ACID/CN  
 E THIOCTIC ACID/CN  
 L9 1 S E3  
 E ACETYL-L-CARNITINE/CN  
 L10 1 S E3  
 E RESVERATROL/CN  
 L11 1 S E3  
 E LECITHIN/CN  
 E N-ACETYL CYSTEINE/CN  
 E ACETYL CYSTEINE/CN  
 E ACETYLCYSTEINE/CN  
 L12 1 S E3

FILE 'CAPLUS' ENTERED AT 09:59:30 ON 23 MAR 2005

L13 1450 S L9  
 L14 826 S L10  
 L15 1859 S L11  
 L16 5712 S L12  
 L17 78314 S LECITHIN? OR PHOSPHATIDYL CHOLINE? OR PHOSPHATIDYLCHOLINE? OR  
 L18 3 S (L9 OR L10) AND L11 AND L17 AND L12

L19 0 S L9 AND L11 AND L17 AND L12  
 L20 3 S L10 AND L11 AND L17 AND L12  
 L21 0 S L20 NOT L18  
 L22 2 S L9 AND L11

FILE 'MEDLINE, BIOSIS, CAPLUS, EMBASE, WPIDS' ENTERED AT 10:05:12 ON 23 MAR 2005

L23 10890 S (ALPHA LIPOIC ACID?) OR (LIPOIC ACID?) OR THIOCTIC ACID? OR "  
 L24 58333 S RESVERATROL? OR "KO-JO-KON" OR "3,4',5-STILBENETRIOL" OR "3,5  
 L25 198733 S (PHOSPHATIDYL (W) CHOLINE?) OR (PHOSPHATIDYLCHOLINE?) OR (CHO  
 L26 5261 S ACETYLCARNITINE? OR (ACETYL (W) CARNITINE?) OR MEDOSAN? OR "A  
 L27 32758 S ACETYLCYSTEIN? OR MERCAPTURIC ACID? OR ACEMUC? OR ACETABS? OR  
 L28 1478 S EURESPIRAN? OR EXOMUC? OR FABROL? OR FLUIMICIL? OR FLUPROWIT?  
 L29 26500 S MUCOSOLVIN? OR (N (W) ACETYL (W) L (W) CYSTEINE) OR "N-ACETYL  
 L30 40161 S L27 OR L28 OR L29  
 L31 5 S L23 AND L24 AND L25 AND L26 AND L30  
 L32 4 DUP REM L31 (1 DUPLICATE REMOVED)  
 L33 11 S L23 AND L24 AND L25 AND L30  
 L34 8 DUP REM L33 (3 DUPLICATES REMOVED)  
 L35 6 S L24 AND L25 AND L26 AND L30  
 L36 4 DUP REM L35 (2 DUPLICATES REMOVED)

=> d cost

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
CONNECT CHARGES	88.02	100.20
NETWORK CHARGES	1.92	3.96
SEARCH CHARGES	219.24	326.47
DISPLAY CHARGES	44.90	94.35

FULL ESTIMATED COST	354.08	524.98
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DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-8.76	-21.17

IN FILE 'MEDLINE, BIOSIS, CAPLUS, EMBASE, WPIDS' AT 10:24:17 ON 23 MAR 2005

=> file stnguide

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	354.53	525.43

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-8.76	-21.17

FILE 'STNGUIDE' ENTERED AT 10:24:47 ON 23 MAR 2005  
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 COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY, JAPAN SCIENCE  
 AND TECHNOLOGY CORPORATION, AND FACHINFORMATIONSZENTRUM KARLSRUHE

FILE CONTAINS CURRENT INFORMATION.  
 LAST RELOADED: Mar 18, 2005 (20050318/UP).

=> save

ENTER L#, L# RANGE, ALL, OR (END):all  
 ENTER NAME OR (END):l10715148/1  
 L# LIST L1-L36 HAS BEEN SAVED AS 'L10715148/L'

=> file medline biosis caplus embase wpids

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
----------------------	------------------	---------------

FULL ESTIMATED COST	0.06	525.49
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	0.00	-21.17

FILE 'MEDLINE' ENTERED AT 10:25:40 ON 23 MAR 2005

FILE 'BIOSIS' ENTERED AT 10:25:40 ON 23 MAR 2005

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FILE 'CAPLUS' ENTERED AT 10:25:40 ON 23 MAR 2005

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FILE 'EMBASE' ENTERED AT 10:25:40 ON 23 MAR 2005

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FILE 'WPIDS' ENTERED AT 10:25:40 ON 23 MAR 2005

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=> s (lipoic acid? or (acetyl (W) L (W) carnitine?) or ("acetyl-L-carnitine")) and  
resveratrol? and (lecithin? or phosphatidyl choline?) and ((N (W) acetyl (W)  
cysteine) or ("N-acetyl cysteine") or ("N-acetylcysteine"))

L37 0 (LIPOIC ACID? OR (ACETYL (W) L (W) CARNITINE?) OR ("ACETYL-L-CAR  
NITINE")) AND RESVERATROL? AND (LECITHIN? OR PHOSPHATIDYL CHOLI  
NE?) AND ((N (W) ACETYL (W) CYSTEINE) OR ("N-ACETYL CYSTEINE")  
OR ("N-ACETYLCYSTEINE"))

=> s lipoic? and carnitine? and resveratrol? and lecithin? and cysteine?  
L38 3 LIPOIC? AND CARNITINE? AND RESVERATROL? AND LECITHIN? AND CYSTEI  
NE?

=> dup rem l38

PROCESSING COMPLETED FOR L38

L39 2 DUP REM L38 (1 DUPLICATE REMOVED)  
ANSWERS '1-2' FROM FILE CAPLUS

=> d l39 1-2 ibib ed abs

L39 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 1

ACCESSION NUMBER: 2001:741547 CAPLUS

DOCUMENT NUMBER: 135:293963

TITLE: Oral pharmaceuticals containing coenzyme Q with high  
dissolution qualities

INVENTOR(S): Chopra, Raj K.

PATENT ASSIGNEE(S): USA

SOURCE: U.S., 11 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6300377	B1	20011009	US 2001-790783	20010222
CA 2432020	AA	20020906	CA 2002-2432020	20020220
WO 2002067864	A2	20020906	WO 2002-US5970	20020220
WO 2002067864	A3	20021219		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,				

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001052822	A1	20010726	WO 2001-US1997	20010118
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
US 6740338	B1	20040525	US 2000-488332	20000120
CA 2397447	AA	20010726	CA 2001-2397447	20010118
EP 1251834	A1	20021030	EP 2001-942547	20010118
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			

PRIORITY APPLN. INFO.:

US 2000-488332

A 20000120

US 2000-637559

A 20000811

WO 2001-US1997

W 20010118

OTHER SOURCE(S): MARPAT 135:127168

ED Entered STN: 27 Jul 2001

AB The present invention relates to a reduced form of coenzyme Q also known as ubiquinol in a pharmaceutical or cosmetic dosage form, preferably an oral dosage form such as a gelatin capsule. Comps. according to the present invention show high bioavailability of the reduced form of Coenzyme Q. The present invention relates to storage stable comps. comprising effective amts. of ubiquinol in combination with an amount of a reducing agent effective to maintain ubiquinol in its reduced state when formulated as in, e.g., capsules, tablets and other orally administrable form. A capsule formulation contained vitamin E acetate 6, hydroxylated lecithin 4, phosphatidylcholine 32, medium-chain triglyceride 20, Gelucire 30, coenzyme Q10 4, and ascorbyl palmitate 4%.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d cost

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

CONNECT CHARGES

14.58

115.17

NETWORK CHARGES

0.42

4.50

SEARCH CHARGES

47.25

373.72

DISPLAY CHARGES

5.30

99.65

FULL ESTIMATED COST

67.55

593.04

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

-1.46

-22.63

IN FILE 'MEDLINE, BIOSIS, CAPLUS, EMBASE, WPIDS' AT 10:29:16 ON 23 MAR 2005

=> s synergy and antioxida?

L40 342 SYNERGY AND ANTIOXIDA?

=> s (synergy or synergestic?) (L) antioxidant?

L41 271 (SYNERGY OR SYNERGESTIC?) (L) ANTIOXIDANT?

=> dup rem l41

PROCESSING COMPLETED FOR L41

L42 153 DUP REM L41 (118 DUPLICATES REMOVED)

ANSWERS '1-47' FROM FILE MEDLINE

ANSWERS '48-70' FROM FILE BIOSIS

ANSWERS '71-135' FROM FILE CAPLUS

ANSWERS '136-138' FROM FILE EMBASE

ANSWERS '139-153' FROM FILE WPIDS

=> s l42 and py<2003

2 FILES SEARCHED...

4 FILES SEARCHED...

L43 114 L42 AND PY<2003

=> d scan

L43 114 ANSWERS BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN

TI Antioxidant synergy of alpha-tocopherol and phospholipids.

IT Miscellaneous Descriptors

antioxidant synergy; antioxidation; fish oils:

chemical aspects, fats and oils; oxidation processes; sardine oil:  
chemical aspects, fats and oils

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):.

L43 114 ANSWERS CAPLUS COPYRIGHT 2005 ACS on STN  
CC 17-13 (Food and Feed Chemistry)  
TI Resveratrol content of some Piedmont wines  
ST wine resveratrol Italy Piedmont; red wine resveratrol Italy Piedmont;  
white wine resveratrol Italy Piedmont  
IT Wine  
(red; resveratrol content of some Italian Piedmont wines)  
IT Wine  
(resveratrol content of some Italian Piedmont wines)  
IT Wine  
(white; resveratrol content of some Italian Piedmont wines)  
IT 501-36-0, Resveratrol  
RL: BOC (Biological occurrence); BSU (Biological study, unclassified);  
BIOL (Biological study); OCCU (Occurrence)  
(resveratrol content of some Italian Piedmont wines)

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):.

L43 114 ANSWERS CAPLUS COPYRIGHT 2005 ACS on STN  
CC 37-6 (Plastics Manufacture and Processing)  
Section cross-reference(s): 35  
TI Synergism between polymer antioxidants; kinetic modelling  
ST hindered phenol hydroperoxide decomposer antioxidative synergism oxidative  
polymer degrdn  
IT Phenols, uses  
RL: NUU (Other use, unclassified); USES (Uses)  
(hindered; kinetic modeling for antioxidative synergism of hindered  
phenols and hydroperoxide decomposers for polymers)  
IT Simulation and Modeling, physicochemical  
(kinetic modeling for antioxidative synergism of hindered phenols and  
hydroperoxide decomposers for polymers)  
IT Hydroperoxides  
Polyolefins  
RL: CPS (Chemical process); PEP (Physical, engineering or chemical  
process); PROC (Process)  
(kinetic modeling for antioxidative synergism of hindered phenols and  
hydroperoxide decomposers for polymers)  
IT Polymer degradation kinetics  
(oxidative; kinetic modeling for antioxidative synergism of hindered  
phenols and hydroperoxide decomposers for polymers)  
IT Antioxidants  
(synergistic; kinetic modeling for antioxidative synergism of hindered  
phenols and hydroperoxide decomposers for polymers)

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):.

L43 114 ANSWERS CAPLUS COPYRIGHT 2005 ACS on STN  
CC 30-20 (Terpenes and Terpenoids)  
Section cross-reference(s): 22, 33, 34  
TI **Synergy** affects of vitamin C and amino acids on the  
**antioxidant** properties of vitamin E  
ST **synergy** effects **antioxidant** vitamin E; amino acid  
**synergy** effect vitamin E; oxidn mechanism vitamin C E; butylamine  
effect vitamin E oxidn; oxygen mol effect vitamin E radical  
IT Amino acids, properties  
RL: PRP (Properties)  
(effect of, on antioxidant properties of vitamin E)  
IT Oxidation  
(of vitamin C and E, mechanism for)

IT Kinetics of oxidation  
(of vitamins E and C)

IT Cooperative phenomena  
(synergism of vitamins C and E as antioxidants)

IT **Antioxidants**  
(vitamins C and E, **synergy** effects of)

IT 1406-18-4, Vitamin E  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(**antioxidant** properties of, **synergy** effects of  
vitamin C on)

IT 52-90-4, Cysteine, uses and miscellaneous 56-41-7, Alanine, uses and  
miscellaneous 109-73-9, Butylamine, uses and miscellaneous 616-91-1,  
N-Acetylcysteine  
RL: PRP (Properties)  
(effect of, on vitamin E antioxidant properties)

IT 7782-44-7, Oxygen, uses and miscellaneous  
RL: PRP (Properties)  
(effect of, on vitamin E radicals)

IT 301-00-8, Methyl linolenate  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(radical oxidation of, inhibition of, by vitamins C and E, synergism in).

IT 50-81-7P, Vitamin C, preparation  
RL: PRP (Properties); PREP (Preparation)  
(**synergy** effects of, on vitamin E **antioxidant**  
properties)

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):.

L43 114 ANSWERS CAPLUS COPYRIGHT 2005 ACS on STN

CC 37-4 (Plastics Manufacture and Processing)

TI Thermo-oxidative degradation of linear low density poly(ethylene) in the  
presence of carbon black: a kinetic approach

ST thermooxidative degrdn carbon black filled linear low density polyethylene

IT Polymer degradation kinetics  
(mechanism of carbon black effect on thermooxidative degradation of linear  
low d. polyethylene)

IT Linear low density polyethylenes  
RL: CPS (Chemical process); PEP (Physical, engineering or chemical  
process); POF (Polymer in formulation); PRP (Properties); PROC (Process);  
USES (Uses)  
(mechanism of carbon black effect on thermooxidative degradation of linear  
low d. polyethylene)

IT Carbon black, uses  
RL: MOA (Modifier or additive use); USES (Uses)  
(mechanism of carbon black effect on thermooxidative degradation of linear  
low d. polyethylene)

IT Polymer degradation  
(thermooxidative; mechanism of carbon black effect on thermooxidative  
degradation of linear low d. polyethylene)

IT 74-85-1D, Ethene, polymers with  $\alpha$ -olefins, polymers with  
 $\alpha$ -olefins  
RL: CPS (Chemical process); PEP (Physical, engineering or chemical  
process); POF (Polymer in formulation); PRP (Properties); PROC (Process);  
USES (Uses)  
(mechanism of carbon black effect on thermooxidative degradation of linear  
low d. polyethylene)

IT 26780-96-1, Naugard Super Q  
RL: MOA (Modifier or additive use); USES (Uses)  
(stabilizer; mechanism of carbon black effect on thermooxidative  
degradation of linear low d. polyethylene)

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):.

L43 114 ANSWERS CAPLUS COPYRIGHT 2005 ACS on STN



CC 30 (Rubber and Other Elastomers)  
 TI Aging of rubber. Some effects of metal contamination  
 IT Rubber  
     (aging of, under metal-catalyzed oxidation and inhibition by  
     2-benzimidazolethiol synergistic mixts. with amine and phenolic  
     oxidants)  
 IT Amines  
     (antioxidant mixts. with 2-benzimidazolethiol, metal-catalyzed  
     degradation and oxidation of rubber inhibition by)  
 IT Phenols  
     (antioxidants, mixts. with 2-benzimidazolethiol, metalcatalyzed  
     degradation and oxidation of rubber inhibition by)  
 IT Salts  
     (catalysis of rubber degradation and oxidation by, inhibition by  
     2-benzimidazolethiol-amine or -phenol antioxidant synergists)  
 IT 583-39-1, 2-Benzimidazolethiol  
     (antioxidant mixts. with amines and phenols, aging inhibition in  
     metal-contaminated rubber by)  
 IT 57-11-4, Stearic acid  
     (salts, rubber aging by)

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):.

L43 114 ANSWERS CAPLUS COPYRIGHT 2005 ACS on STN  
 CC 37-6 (Plastics Manufacture and Processing)  
     Section cross-reference(s): 27, 38  
 TI Aryl-substituted dithianes and dithiolanes as process stabilizers for  
     polyolefins  
 ST polyolefin stabilizer aryl substituted dithiane dithiolane  
 IT Antioxidants  
     (aryl-substituted dithianes and dithiolanes as process stabilizers for  
     polyolefins)  
 IT Extrusion of plastics and rubbers  
     (aryl-substituted dithianes and dithiolanes as process stabilizers for  
     polyolefins processed by extrusion)  
 IT Cooperative phenomena  
     (synergism; **synergy** of aryl-substituted dithianes and  
     dithiolanes with phenolic **antioxidants** in stabilization of  
     polyolefins)  
 IT 50766-67-1P  
     RL: MOA (Modifier or additive use); RCT (Reactant); SPN (Synthetic  
     preparation); TEM (Technical or engineered material use); PREP  
     (Preparation); RACT (Reactant or reagent); USES (Uses)  
     (aryl-substituted dithianes and dithiolanes as process stabilizers for  
     polyolefins)  
 IT 6331-22-2P 24588-72-5P 24588-74-7P 57009-76-4P 261767-79-7P  
     261767-80-0P 261767-81-1P 261767-82-2P 261767-83-3P 261767-84-4P  
     261767-85-5P 261767-86-6P  
     RL: MOA (Modifier or additive use); SPN (Synthetic preparation); TEM  
     (Technical or engineered material use); PREP (Preparation); USES (Uses)  
     (aryl-substituted dithianes and dithiolanes as process stabilizers for  
     polyolefins)  
 IT 25085-53-4, Himont 6501  
     RL: PEP (Physical, engineering or chemical process); POF (Polymer in  
     formulation); PROC (Process); USES (Uses)  
     (aryl-substituted dithianes and dithiolanes as process stabilizers for  
     polyolefins)  
 IT 540-63-6, 1,2-Ethanedithiol 93206-91-8, 4-Dodecyloxy-3-  
     methoxybenzaldehyde  
     RL: RCT (Reactant); RACT (Reactant or reagent)  
     (reactant in prepn of aryl-substituted dithianes and dithiolanes as  
     process stabilizers for polyolefins)  
 IT 6683-19-8 31570-04-4, Tris(2,4-di-tert-butylphenyl)phosphite  
     261767-87-7

RL: MOA (Modifier or additive use); USES (Uses)  
(**synergy** of aryl-substituted dithianes and dithiolanes with  
phenolic **antioxidants** in stabilization of polyolefins)

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):.

L43 114 ANSWERS WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN

AN 2000-497711 [44] WPIDS

TI Composition of ingredients for biologically-active additive to food-stuffs  
ussurochka.

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):.

L43 114 ANSWERS BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN

TI Synergy between oat polyphenolics and alpha-tocopherol in prevention of  
LDL oxidation.

IT Methods & Equipment

HPLC [high performance liquid chromatography]: characterization method,  
liquid chromatography

IT Miscellaneous Descriptors

Meeting Abstract

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):.

L43 114 ANSWERS CAPLUS COPYRIGHT 2005 ACS on STN

CC 37-6 (Plastics Manufacture and Processing)

TI Synergy effects of binary and ternary mixtures of inhibitors in the  
process of polypropylene autoxidation

ST antioxidant polypropylene autoxidn

IT **Antioxidants**

Simulation and Modeling, physicochemical

(**synergy** effects of binary and ternary mixts. of inhibitors  
in the process of polypropylene autoxidn.)

IT 2082-79-3, Naugard 76 10081-67-1, Naugard 445 13408-29-2, Nitroxyl  
radical 25085-53-4, ProFax 6501

RL: PRP (Properties)

(synergy effects of binary and ternary mixts. of inhibitors in the  
process of polypropylene autoxidn.)

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):.

L43 114 ANSWERS BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN

TI Antioxidant activity of the nitrogenous natural compounds.

IT Miscellaneous Descriptors

FOOD CHEMISTRY; LIPIDS; MAILLARD REACTION; PROTEINS; RADICALS

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):.

L43 114 ANSWERS CAPLUS COPYRIGHT 2005 ACS on STN

CC 18-0 (Animal Nutrition)

Section cross-reference(s): 14

TI Longterm adequacy of all major **antioxidants**, presumably in  
**synergy** with other vegetable-derived nutrients, may help to  
prevent early stages of cardiovascular disease and cancer

ST review cardiovascular disease cancer diet

IT **Antioxidants**

Diet

Neoplasm

(longterm adequacy of all major **antioxidants**, presumably in  
**synergy** with other vegetable-derived nutrients, may help to  
prevent early stages of cardiovascular disease and cancer)

IT Cardiovascular system

(disease, longterm adequacy of all major **antioxidants**,

presumably in **synergy** with other vegetable-derived nutrients,  
may help to prevent early stages of cardiovascular disease and cancer)

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):.

L43 114 ANSWERS CAPLUS COPYRIGHT 2005 ACS on STN

IC ICM A61K

CC 63-6 (Pharmaceuticals)

TI Multi-component antioxidant compounds, pharmaceutical compositions  
containing same, and their use for reducing or preventing oxidative stress  
ST sulfhydryl antioxidant compn oxidative stress

IT Testis

(-blood barrier; multi-component antioxidant compds. for reducing or  
preventing oxidative stress)

IT Blood

(-retina barrier; multi-component antioxidant compds. for reducing or  
preventing oxidative stress)

IT Blood

(-testis barrier; multi-component antioxidant compds. for reducing or  
preventing oxidative stress)

IT Hepatitis

(C; multi-component antioxidant compds. for reducing or preventing  
oxidative stress)

IT Brain, disease

Prion diseases

(Creutzfeldt-Jakob; multi-component antioxidant compds. for reducing or  
preventing oxidative stress)

IT Platelet (blood)

(activation, pathogenic; multi-component antioxidant compds. for  
reducing or preventing oxidative stress)

IT Respiratory distress syndrome

(adult; multi-component antioxidant compds. for reducing or preventing  
oxidative stress)

IT Nervous system, disease

(amyotrophic lateral sclerosis; multi-component antioxidant compds. for  
reducing or preventing oxidative stress)

IT Infection

(bacterial; multi-component antioxidant compds. for reducing or  
preventing oxidative stress)

IT Brain

(basal ganglia, degeneration; multi-component antioxidant compds. for  
reducing or preventing oxidative stress)

IT Drug delivery systems

(buccal; multi-component antioxidant compds. for reducing or preventing  
oxidative stress)

IT Drug delivery systems

(carriers; multi-component antioxidant compds. for reducing or  
preventing oxidative stress)

IT Nervous system, disease

(central, oxidative stress in; multi-component antioxidant compds. for  
reducing or preventing oxidative stress)

IT Ischemia

(cerebral; multi-component antioxidant compds. for reducing or  
preventing oxidative stress)

IT Drug delivery systems

(emulsions; multi-component antioxidant compds. for reducing or  
preventing oxidative stress)

IT Drug delivery systems

(gels; multi-component antioxidant compds. for reducing or preventing  
oxidative stress)

IT Drug delivery systems

(inhalants; multi-component antioxidant compds. for reducing or  
preventing oxidative stress)

IT Macrophage

(intravascular macrophage adhesion; multi-component antioxidant compds. for reducing or preventing oxidative stress)

IT Brain, disease  
(ischemia; multi-component antioxidant compds. for reducing or preventing oxidative stress)

IT Peroxidation  
(lipid; multi-component antioxidant compds. for reducing or preventing oxidative stress)

IT Nerve, disease  
(motor; multi-component antioxidant compds. for reducing or preventing oxidative stress)

IT AIDS (disease)  
Aging, animal  
Alzheimer's disease  
Amnesia  
Antioxidants  
Asthma  
Atherosclerosis  
Blood-brain barrier  
Buffers  
Cardiovascular system, disease  
Cataract  
Cell membrane  
Cystic fibrosis  
Diabetes mellitus  
Down's syndrome  
Hypertension  
Inflammation  
Influenza  
Multiple sclerosis  
Neoplasm  
Oxidative stress, biological  
Parkinson's disease  
Preservatives  
Radiotherapy  
Rheumatoid arthritis  
Solvents  
Sunburn  
Thickening agents  
Tobacco smoke  
(multi-component antioxidant compds. for reducing or preventing oxidative stress)

IT Reactive oxygen species  
RL: ADV (Adverse effect, including toxicity); BSU (Biological study, unclassified); BIOL (Biological study)  
(multi-component antioxidant compds. for reducing or preventing oxidative stress)

IT Peptides, biological studies  
RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); PEP (Physical, engineering or chemical process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)  
(multi-component antioxidant compds. for reducing or preventing oxidative stress)

IT Heart, disease  
Inflammation  
(myocarditis; multi-component antioxidant compds. for reducing or preventing oxidative stress)

IT Drug delivery systems  
(nasal; multi-component antioxidant compds. for reducing or preventing oxidative stress)

IT Drug delivery systems  
(oral; multi-component antioxidant compds. for reducing or preventing oxidative stress)

IT Drug delivery systems  
(parenterals; multi-component antioxidant compds. for reducing or preventing oxidative stress)

IT Lipids, reactions  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(peroxidn.; multi-component antioxidant compds. for reducing or preventing oxidative stress)

IT Drug delivery systems  
(rectal; multi-component antioxidant compds. for reducing or preventing oxidative stress)

IT Eye  
(retina, -blood barrier; multi-component antioxidant compds. for reducing or preventing oxidative stress)

IT Brain, disease  
Prion diseases  
(scrapie; multi-component antioxidant compds. for reducing or preventing oxidative stress)

IT Drug delivery systems  
(skin pads; multi-component antioxidant compds. for reducing or preventing oxidative stress)

IT Blood vessel  
(smooth muscle, proliferation; multi-component antioxidant compds. for reducing or preventing oxidative stress)

IT Drug delivery systems  
(solns.; multi-component antioxidant compds. for reducing or preventing oxidative stress)

IT Brain, disease  
(spongiform encephalopathy; multi-component antioxidant compds. for reducing or preventing oxidative stress)

IT Brain, disease  
(stroke; multi-component antioxidant compds. for reducing or preventing oxidative stress)

IT Drug delivery systems  
(suspension; multi-component antioxidant compds. for reducing or preventing oxidative stress)

IT Drug delivery systems  
(topical; multi-component antioxidant compds. for reducing or preventing oxidative stress)

IT Drug delivery systems  
(transdermal; multi-component antioxidant compds. for reducing or preventing oxidative stress)

IT Nervous system  
(viral infection; multi-component antioxidant compds. for reducing or preventing oxidative stress)

IT Infection  
(viral; multi-component antioxidant compds. for reducing or preventing oxidative stress)

IT 50-36-2, Cocaine 57-27-2, Morphine, biological studies  
RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)  
(multi-component antioxidant compds. for reducing or preventing oxidative stress)

IT 7782-44-7D, Oxygen, reactive species  
RL: ADV (Adverse effect, including toxicity); BSU (Biological study, unclassified); BIOL (Biological study)  
(multi-component antioxidant compds. for reducing or preventing oxidative stress)

IT 9027-41-2, Hydrolase 9031-96-3, Peptidase  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(multi-component antioxidant compds. for reducing or preventing oxidative stress)

IT 52-90-4, Cysteine, biological studies  
RL: BUU (Biological use, unclassified); PEP (Physical, engineering or chemical process); PYP (Physical process); RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); PROC (Process); RACT (Reactant)

or reagent); USES (Uses)

(multi-component antioxidant compds. for reducing or preventing oxidative stress)

IT 292631-03-9P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(multi-component antioxidant compds. for reducing or preventing oxidative stress)

IT 29022-11-5 71989-31-6 103213-32-7

RL: RCT (Reactant); RACT (Reactant or reagent)

(multi-component antioxidant compds. for reducing or preventing oxidative stress)

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):end

=> d cost

COST IN U.S. DOLLARS

SINCE FILE TOTAL

ENTRY SESSION

CONNECT CHARGES

62.65 163.24

NETWORK CHARGES

1.20 5.28

SEARCH CHARGES

58.59 385.06

DISPLAY CHARGES

5.30 99.65

FULL ESTIMATED COST

-----  
127.74 653.23

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE TOTAL

ENTRY SESSION

CA SUBSCRIBER PRICE

-1.46 -22.63

IN FILE 'MEDLINE, BIOSIS, CAPLUS, EMBASE, WPIDS' AT 10:38:08 ON 23 MAR 2005

=> d his

(FILE 'HOME' ENTERED AT 09:45:47 ON 23 MAR 2005)

FILE 'CAPLUS' ENTERED AT 09:45:52 ON 23 MAR 2005

L1 9392 S SYNERGY

L2 152 S SYNERGY AND (ANTIOXIDANT? OR LIPOIC ACID? OR "ACETYL-L-CARNIT

L3 2 S L2 AND (COGNITIVE OR COGNITION OR AUDITORY OR HEARING)

E SEIDMAN M/AU

L4 141 S E3-E12

L5 11 S L4 AND (MITOCHONDRI?)

L6 4 S L4 AND (ANTIOXIDANT?)

L7 1 S L6 NOT L5

L8 1 S L4 AND (RESVERATROL? OR LIPOIC ACID? OR "ACETYL-L-CARNITINE"

FILE 'STNGUIDE' ENTERED AT 09:56:12 ON 23 MAR 2005

FILE 'CAPLUS' ENTERED AT 09:57:26 ON 23 MAR 2005

FILE 'REGISTRY' ENTERED AT 09:57:38 ON 23 MAR 2005

E ALPHA LIPOIC ACID/CN

E THIOCTIC ACID/CN

L9 1 S E3

E ACETYL-L-CARNITINE/CN

L10 1 S E3

E RESVERATROL/CN

L11 1 S E3

E LECITHIN/CN

E N-ACETYL CYSTEINE/CN

E ACETYL CYSTEINE/CN

E ACETYLCYSTEINE/CN

L12

1 S E3

FILE 'CAPLUS' ENTERED AT 09:59:30 ON 23 MAR 2005

L13 1450 S L9  
L14 826 S L10  
L15 1859 S L11  
L16 5712 S L12  
L17 78314 S LECITHIN? OR PHOSPHATIDYL CHOLINE? OR PHOSPHATIDYLCHOLINE? OR  
L18 3 S (L9 OR L10) AND L11 AND L17 AND L12  
L19 0 S L9 AND L11 AND L17 AND L12  
L20 3 S L10 AND L11 AND L17 AND L12  
L21 0 S L20 NOT L18  
L22 2 S L9 AND L11

FILE 'MEDLINE, BIOSIS, CAPLUS, EMBASE, WPIDS' ENTERED AT 10:05:12 ON 23  
MAR 2005

L23 10890 S (ALPHA LIPOIC ACID?) OR (LIPOIC ACID?) OR THIOCTIC ACID? OR "  
L24 58333 S RESVERATROL? OR "KO-JO-KON" OR "3,4',5-STILBENETRIOL" OR "3,5  
L25 198733 S (PHOSPHATIDYL (W) CHOLINE?) OR (PHOSPHATIDYLCHOLINE?) OR (CHO  
L26 5261 S ACETYLCARNITINE? OR (ACETYL (W) CARNITINE?) OR MEDOSAN? OR "A  
L27 32758 S ACETYLCYSTEIN? OR MERCAPTURIC ACID? OR ACEMUC? OR ACETABS? OR  
L28 1478 S EURESPIRAN? OR EXOMUC? OR FABROL? OR FLUIMICIL? OR FLUPROWIT?  
L29 26500 S MUCOSOLVIN? OR (N (W) ACETYL (W) L (W) CYSTEINE) OR "N-ACETYL  
L30 40161 S L27 OR L28 OR L29  
L31 5 S L23 AND L24 AND L25 AND L26 AND L30  
L32 4 DUP REM L31 (1 DUPLICATE REMOVED)  
L33 11 S L23 AND L24 AND L25 AND L30  
L34 8 DUP REM L33 (3 DUPLICATES REMOVED)  
L35 6 S L24 AND L25 AND L26 AND L30  
L36 4 DUP REM L35 (2 DUPLICATES REMOVED)

FILE 'STNGUIDE' ENTERED AT 10:24:47 ON 23 MAR 2005  
SAVE ALL L10715148/L

FILE 'MEDLINE, BIOSIS, CAPLUS, EMBASE, WPIDS' ENTERED AT 10:25:40 ON 23  
MAR 2005

L37 0 S (LIPOIC ACID? OR (ACETYL (W) L (W) CARNITINE?) OR ("ACETYL-L-  
L38 3 S LIPOIC? AND CARNITINE? AND RESVERATROL? AND LECITHIN? AND CYS  
L39 2 DUP REM L38 (1 DUPLICATE REMOVED)  
L40 342 S SYNERGY AND ANTIOXIDA?  
L41 271 S (SYNERGY OR SYNGERGISTIC?) (L) ANTIOXIDANT?  
L42 153 DUP REM L41 (118 DUPLICATES REMOVED)  
L43 114 S L42 AND PY<2003

=> s 143 and (antioxidant (W) synergy)  
L44 20 L43 AND (ANTIOXIDANT (W) SYNERGY)

=> s 143 and (antioxidant synergy of alpha-tocopherol and phospholipids)  
L45 1 L43 AND (ANTIOXIDANT SYNERGY OF ALPHA-TOCOPHEROL AND PHOSPHOLIP  
IDS)

=> d 145 ibib ed abs.

L45 ANSWER 1 OF 1 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN  
ACCESSION NUMBER: 1999:415272 BIOSIS  
DOCUMENT NUMBER: PREV199900415272  
TITLE: **Antioxidant synergy of alpha-  
tocopherol and phospholipids.**  
AUTHOR(S): Bandarra, Narcisa M.; Campos, Regina M.; Batista, Irineu;  
Nunes, M. Leonor; Empis, Jose M. [Reprint author]  
CORPORATE SOURCE: Centro de Engenharia Biologica e Quimica, Instituto  
Superior Tecnico, Av. Rovisco Pais, 1049-001, Lisboa,  
Portugal  
SOURCE: Journal of the American Oil Chemists' Society, (Aug., 1999)

Vol. 76, No. 8, pp. 905-913. print.

CODEN: JAOCA7. ISSN: 0003-021X.

DOCUMENT TYPE:

Article

LANGUAGE:

English

ENTRY DATE:

Entered STN: 18 Oct 1999

Last Updated on STN: 18 Oct 1999

ED Entered STN: 18 Oct 1999

Last Updated on STN: 18 Oct 1999

AB The prevention of oxidation of a refined sardine oil by alpha-tocopherol at 0.04%, by several **phospholipids** (phosphatidylcholine (PC), phosphatidylethanolamine (PE), and cardiolipin (CL)) at 0.5%, as well as by combinations of alpha-tocopherol with each phospholipid, was investigated. The evolution of the oxidation process during 1 mon at 40 +- 2degreeC was followed by a series of methods, measuring peroxide value (PV), diene, triene, and polyene index, and absorbance at 430 nm, while alpha-tocopherol and phospholipid content were being monitored. Among these indices, PV was found to be the most adequate to follow the process. PC was the most effective individual **antioxidant** as shown by the PV values obtained at the end of the storage period, which were 54.0, 83.4, 87.9, and 97.7 meq O2/kg for PC, CL, PE, and alpha-tocopherol, respectively. The highest synergistic effect was obtained with a mixture of alpha-tocopherol and PE, and the second and third best by mixtures made with PC and CL, respectively. The corresponding PV values recorded at the end of the period were 27.0, 35.0, and 58.0 meq O2/kg. The high degree of **synergy** between PE and tocopherol is probably due to the occurrence of a simultaneous **antioxidant** mechanism involving Maillard compounds.

=> save

ENTER L#, L# RANGE, ALL, OR (END):all

ENTER NAME OR (END):l10715148/1

'L10715148/L' IN USE

A single name cannot be used for two saved items at the same time.

Enter "Y" if you wish to replace the current saved name with a new definition. Enter "N" if the current saved definition must be preserved. You may then reenter the SAVE command with a different saved name. Enter "DISPLAY SAVED" at an arrow prompt (=>) to see a list of your currently defined saved names.

REPLACE OLD DEFINITION? Y/(N):y

L# LIST L1-L45 HAS BEEN SAVED AS 'L10715148/L'

=> d his

(FILE 'HOME' ENTERED AT 09:45:47 ON 23 MAR 2005)

FILE 'CAPLUS' ENTERED AT 09:45:52 ON 23 MAR 2005

L1 9392 S SYNERGY  
L2 152 S SYNERGY AND (ANTIOXIDANT? OR LIPOIC ACID? OR "ACETYL-L-CARNIT  
L3 2 S L2 AND (COGNITIVE OR COGNITION OR AUDITORY OR HEARING)  
E SEIDMAN M/AU  
L4 141 S E3-E12  
L5 11 S L4 AND (MITOCHONDRI?)  
L6 4 S L4 AND (ANTIOXIDANT?)  
L7 1 S L6 NOT L5  
L8 1 S L4 AND (RESVERATROL? OR LIPOIC ACID? OR "ACETYL-L-CARNITINE")

FILE 'STNGUIDE' ENTERED AT 09:56:12 ON 23 MAR 2005

FILE 'CAPLUS' ENTERED AT 09:57:26 ON 23 MAR 2005

FILE 'REGISTRY' ENTERED AT 09:57:38 ON 23 MAR 2005

E ALPHA LIPOIC ACID/CN

E THIOCTIC ACID/CN



L9 1 S E3  
E ACETYL-L-CARNITINE/CN  
L10 1 S E3  
E RESVERATROL/CN  
L11 1 S E3  
E LECITHIN/CN  
E N-ACETYL CYSTEINE/CN  
E ACETYL CYSTEINE/CN  
E ACETYLCYSTEINE/CN  
L12 1 S E3

FILE 'CAPLUS' ENTERED AT 09:59:30 ON 23 MAR 2005

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L14 826 S L10  
L15 1859 S L11  
L16 5712 S L12  
L17 78314 S LECITHIN? OR PHOSPHATIDYL CHOLINE? OR PHOSPHATIDYLCHOLINE? OR  
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L29 26500 S MUCOSOLVIN? OR (N (W) ACETYL (W) L (W) CYSTEINE) OR "N-ACETYL  
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L35 6 S L24 AND L25 AND L26 AND L30  
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SAVE ALL L10715148/L

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L40 342 S SYNERGY AND ANTIOXIDA?  
L41 271 S (SYNERGY OR SYNERGISTIC?) (L) ANTIOXIDANT?  
L42 153 DUP REM L41 (118 DUPLICATES REMOVED)  
L43 114 S L42 AND PY<2003  
L44 20 S L43 AND (ANTIOXIDANT (W) SYNERGY)  
L45 1 S L43 AND (ANTIOXIDANT SYNERGY OF ALPHA-TOCOPHEROL AND PHOSPHO  
SAVE ALL L10715148/L